



INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE

SAN FRANCISCO

universalconference.us

INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE

Volume 02, Issue 08, 2025 (26-AUGUST)

Editor in Chief

Dr. Rajeet Ojha - Interdisciplinary Research in Basic Sciences, Jamia Millia Islamia, New Delhi -110025, India

Editorial Team

Sunita Sarawagi - Indian Institute of Technology Bombay, Mumbai, India.

Dr Manjunatha LH - Professor, REVA University, INDIA

Asish Bera - Edge Hill University, UK, BITS Pilani, India

Dr Sunildro LS Akoijam - Assistant Professor of Management, North Eastern Hill University, India

Madan Mohan Singh - Professor of Mathematics, North-Eastern Hill University, Shillong, India

Dr. Anupam Singh - Associate Professor-CSE, Graphic Era Hill University Dehradun, India

Dr. Sargam Bahl Walia - School of Management, Graphic Era Hill University, Dehradun, Uttarakhand, India

Narayan Pradhan - Indian Association for the Cultivation of Science

Ashok Kumar - Kumar Associate Professor E&CE National Institute of Technology. Hamirpur, India.

Anjali Pal - Department of Civil Engineering, Indian Institute of Technology Kharagpur - 721302, India.

Rajnish Joshi - Professor of Medicine, All India Institute of Medical Sciences, Bhopal, India

Mukul Kumar - IIT Mumbai (India); Meijo University (Japan); HEG Ltd. (India)

Prof. Kuruvilla Joseph - Indian Institute of Space Science and Technology (IIST)

Prof. Yogesh C. Sharma - D.Sc., FRSC, FBRs, FIAPS, FISEES, Department of Chemistry, Indian Institute of Technology

Professor Indra Mani Mishra - Indian Institute of Technology (Indian School of Mines), Dhanbad; Formerly at India

Eshkaraev Sadridin Chorievich - Head of the Department of Medicine and Natural Sciences, Doctor of Philosophy in Chemistry, Associate Professor, Termez University of Economics and Service, Termez, Uzbekistan.

esadir_74@rambler.ru

INNOVATION INFRATUZILMALAR YORDAMIDA YOSHLARNING LOYIHALARINI MOLİYALASHTIRISHGA TAYYORLASH AHAMIYATI

Nuriddinov Davronbek Murodiljon o‘g‘li

Annotatsiya: Startup akseleratorlarning asosiy maqsadi - yangi innovatsion loyihalarni qisqa vaqt ichida bozorga tayyor holga keltirish va ularning muvaffaqiyatli faoliyatini boshlash uchun kerakli resurslarni taqdim etishdir. Bu jarayon natijasida startaplar investitsiya olish va bozor raqobatida kuchli o‘rin egallash imkoniyatiga ega bo‘ladilar.

Kalit so‘zlar: startup, investitsiya, treninglar, mentorlik, koalitsiya, ekspert baholash tizimi, inovatsionlik, rivojlanish potentsiali, texnologik parklar, startuplarini moliyalashtirish mexanizmi, subsidiyalar, xususiy sektor.

Innovatsion infratuzilmalar yordamida yoshlarning loyihalarini moliyalashtirishga tayyorlash zamonaviy iqtisodiyot va texnologik taraqqiyot sharoitida juda katta ahamiyatga ega. Innovatsion infratuzilmalar yoshlar uchun tadqiqot laboratoriyalari, texnoparklar, startap inkubatorlari va akseleratorlarni tashkil qiladi. Ushbu imkoniyatlar yoshlarga loyihalarini tayyorlash va rivojlantirish uchun zaruriy texnik va intellektual resurslarni taqdim etadi.

Buning natijasida yoshlar tomonidan innovatsion loyihalarni amalga oshirish jarayoni tezlashadi, ular moliyaviy ko‘makka ega bo‘lib, ijodiy loyihalarining samaradorligini oshiradilar. Shu bilan birga, ushbu jarayonda innovatsion infratuzilmalarni rivojlantirish va sifatli moliyaviy xizmatlar ko‘rsatish tizimlarini yo‘lga qo‘yish ham asosiy ahamiyatga ega bo‘ladi. Bunda innovatsion texnoparklar, startap akseleratorlar va biznes inkubatorlarning ro‘li yuqori.

Startup akselerator - bu biznesi boshqa kompaniyalarga (akselerator rezidentlariga) yordam berishdan iborat bo‘lgan kompaniya hisoblanadi.

Startup akseleratorlar rezidentlarga jamoaga biznes-modelni “charxlash”da, zarur kontaktlarga ega bo‘lishda va savdoni oshirishda yordam beradigan dasturni taklif qiladi. Dastur uch oydan yarim yilgacha davom etadi. Odatda, akseleratorning kovorkingi bo‘lib, rezident kompaniyalar akseleratsiya chog‘ida o‘sha yerda bo‘ladi.

Shuningdek, Startup akseleratorlar yangi tashkil etilgan innovatsion biznes loyihalarini (startaplarni) tezkor rivojlantirish va bozorga chiqarish uchun maxsus dasturlar taqdim etadigan platform bo‘lib xizmat qiladi. Ular startaplarga quyidagi asosiy xizmatlarni ko‘rsatadi:

Mentorlik va maslahatlar: Tajribali mutaxassislar tomonidan strategik maslahatlar beriladi, biznes-reja va mahsulot rivojlantirish bo'yicha ko'rsatmalar taqdim etiladi.

Moliyaviy ko'mak: Akseleratorlar ko'pincha startaplarga dastlabki sarmoyalarni jalb qilishda yordam beradi yoki o'z mablag'larini kiritadi.

Tarmoq va aloqalar: Startaplar potentsial investorlar, mijozlar va hamkorlar bilan bog'lanish imkoniga ega bo'ladilar.

Ta'lim dasturlari: Startaplarni yuritish, marketing, texnologiyalar va qonunchilik bo'yicha maxsus treninglar va seminarlar tashkil qilinadi.

Ish maydoni: Ba'zi akseleratorlar startaplar uchun ofis maydonini bepul yoki imtiyozli sharoitlarda taqdim etadi.

Startup akseleratorlarning asosiy maqsadi - yangi innovatsion loyihalarni qisqa vaqt ichida bozorga tayyor holga keltirish va ularning muvaffaqiyatli faoliyatini boshlash uchun kerakli resurslarni taqdim etishdir. Bu jarayon natijasida startaplar investitsiya olish va bozor raqobatida kuchli o'rin egallash imkoniyatiga ega bo'ladilar.

Startup akseleratorlar moliyaviy xavf-xatarlarni kamaytirish orqali loyihalarning muvaffaqiyatga erishish ehtimolini oshiradi. Bu esa o'z navbatida samarasiz hisoblangan loyihalarni moliyalashtirishni oldini oladi.

Mentorlik va maslahatlar: Tajribali mutaxassislar tomonidan strategik maslahatlar beriladi, biznes-reja va mahsulot rivojlantirish bo'yicha ko'rsatmalar taqdim etiladi.

Moliyaviy ko'mak: Akseleratorlar ko'pincha startaplarga dastlabki sarmoyalarni jalb qilishda yordam beradi yoki o'z mablag'larini kiritadi.

Tarmoq va aloqalar: Startaplar potentsial investorlar, mijozlar va hamkorlar bilan bog'lanish imkoniga ega bo'ladilar.

Ta'lim dasturlari: Startaplarni yuritish, marketing, texnologiyalar va qonunchilik bo'yicha maxsus treninglar va seminarlar tashkil qilinadi.

Ish maydoni: Ba'zi akseleratorlar startaplar uchun ofis maydonini bepul yoki imtiyozli sharoitlarda taqdim etadi.

Startup akseleratorlarning asosiy maqsadi - yangi innovatsion loyihalarni qisqa vaqt ichida bozorga tayyor holga keltirish va ularning muvaffaqiyatli faoliyatini boshlash uchun kerakli resurslarni taqdim etishdir. Bu jarayon natijasida startaplar investitsiya olish va bozor raqobatida kuchli o'rin egallash imkoniyatiga ega bo'ladilar.

Foydalanilgan adabiyotlar:

1. Lex.uz
2. Edu.uz
3. G'ulomov S.S. "Tadbirkorlik va kichik biznes". T., 2002
4. G'ulomov S.S. "Investitsiyani loyihaviy tahlili". T., 1995 yil

5. Hargadon Endryu. *Innovatsiyalarni boshqarish. Etakchi kompaniyalarning tajribasi*, M., 2007 — 304-bet. [ISBN 1-57851-904-7](#)
6. 4.2. [Drucker, Piter Ferdinand](#). *Biznes va innovatsiya*, M., 2007 — 432-bet. [ISBN 0-88730-618-7](#).
7. 4.3. Shemetev A.A.. *Innovatsion menejmentning xalqaro standartlari o'quv qo'llanma (oliy o'quv yurtlari talabalari va avangard o'qituvchilari uchun)*, 2014. [ISBN 978-1-62951-210-5](#).

O‘ZBEK PSIXOLOGLARI QARASHLARIDA KOMPETENTLIK MASALASINING YORITILISHI

Erimmetova Nafisa Bahramovna

Al-Xorazmiy universiteti Xalqaro hamkorlik bo‘limi bosh mutaxassisi

Zamonaviy jamiyatda inson faoliyatining muvaffaqiyatli bo‘lishi, ayniqsa ta’lim tizimida shaxsning kompetent bo‘lishi muhim ahamiyat kasb etmoqda. Kompetentlik tushunchasi insonning kasbiy, ijtimoiy va shaxsiy sohalarida samarali harakat qila olish salohiyatini ifodalaydi. Bu tushuncha xalqaro ilmiy doiralarda keng o‘rganilgan bo‘lsa-da, o‘zbek psixologiyasi doirasida ham kompetentlikning mazmuni, shakllanishi va rivojlanishiga oid muhim ilmiy qarashlar mavjud.

O‘zbek psixologlari tomonidan ham innovasiya, innovatsion tafakkur, talabalarning o‘ziga xos o‘quv-ilmiy faoliyati masalalari keng qamrovda yoritib berilgan. Xususan, M.G.Davletshin o‘z ilmiy izlanishlarida aynan innovasiya masalasiga to‘xtalib o‘tmagan bo‘lsa ham, shaxs qobiliyatlari, bo‘lajak pedagoglarning kreativ fikrlashi masalarini tadqiq qilgan. Bo‘lajak pedagog “o‘zlashtirgan ma’lumotlarini zamon bilan hamnafas holda yangi g‘oyalar uchun asos qila olish”¹ lozimdir. Mazkur fikr asosida aynan talbalarning innovatsion kompetentligini rivojlantirish zarurati ochib berilgan. Chunki, o‘zlashtirilgan ma’lumotlarni yangicha qarash asosida amaliyotda qo‘llash uchun talabadan kreativ tafakkur, keng dunyoqarash talab etiladi.

V.M.Karimova va uning shogirdlari tomonidan innovatsion kompetentlikning muhim mezonini bo‘lgan mustaqil fikrlash masalasi keng tadqiq qilingan. Xususan, V.M.Karimova «obyektiv olamdagi voqea-hodisalarning inson ongiga ta’sir etishi natijasida hosil bo‘ladigan tuyg‘u «fikir» deb ataladi. Fikr asosida inson ko‘zi bevosita ilg‘amayotgan, uning ko‘z o‘ngida bo‘lmagan, bo‘lgan taqdirda ham o‘sha narsaning ichki xususiyatiga aloqador bo‘lgan sirli jihatlarini ko‘rish imkoniyatiga ega bo‘ladi. Shaxsning mustaqil fikrlashi uning o‘zi va boshqalarni fikrlarini tanqidiy baholay olishida, qarashlarining aniqligida, fikrlar qarama-qarshiligini anglay olishida, nazariy va amaliy fikrlarni uyg‘unlashtira olishida, tashabbuskorligida ko‘rinadi»². Bizningcha, shaxsdagi innovatsion kompetentlikning asosini tashkil etuvchi mustaqil fikrlash innovatsion tafakkurga olib keladi. Natijada shaxs innovatsion tashabbuslarni namoyon qiladi.

1. ¹ Davletshin M.G. Zamonaviy maktab o‘quvchisining psixologiyasi. T., O‘zbekiston. - 30 bet.

² Karimova V.M., Xolyigitova N.X. Psixologiya. O‘quv qo‘llanma. – T.: “Iqtisodiyot”, 2014. – 175 b.

Shaxsning tafakkuri, ijodif fikrlashi masalasida keng doirada ilmiy izlanish olib borgan olimlardan biri E.G'oziyevdir. E.G'oziyev aynan talabalarning mustaqil ijodiy fikrlashini shakllanishi masalasini tadqiq etib, "Talabalar tafakkuri, asosan, o'qish va mustaqil bilim olish faoliyatlarida intensiv va uzluksiz ravishda rivojlanadi. Ma'ruza mashg'ulotlari ularning reproduktiv tafakkurni taqozo etsa ham, lekin seminar mashg'ulotlari, laboratoriya praktikumi produktiv fikr yuritish faoliyatini talab qiladi. Produktiv tafakkur esa egallangan bilim asosida qisqa muddatda yangi ilmiy, original g'oyalarni paydo qilishni talab etadi"³. Olim produktiv tafakkurning o'ziga xos sifatlarini fikrlarning orginalligi, intuitiv harakterga egaligi, mantiqiy izchilligi bilan belgilab ko'rsatadi. Mazkur jihatlar, o'ylashimizcha shaxsning innovatsion kompetentligini asosi sifatida xizmat qiladi. Chunki innovatsion kompetentlik g'oyalarning orginalligini ko'rsata bilishda, fikrlar mantiqig'ini amalda qo'llay olishda ko'rinadi.

Z.T.Nishanova esa dissertasion tadqiqotlarida mustaqil fikrlashning o'ziga xos jihatlarini o'rganib, «Mustaqil fikrlash shaxs xislati sifatida har qanday faoliyat turida individual va jamoaviy yutuqlarga erishishda yuqori ko'rsatkichni ta'minlaydigan muhim omillardan biridir»⁴, deb ta'kidlaydi. Darhaqiqat shaxsning faoliyatdagi muvaffaqiyati uning mustaqil fikrlash darajasiga bog'liq. Xattoki innovatsion faoliyatdagi muvaffaqiyat va tashabbslar bevosita mustaqil ijodiy fikrlashga asoslanadi. Biz ham o'z ilmiy izlanishlarimizda inovatsion kompetentlikni rivojlantirish mexanizmlaridan biri sifatida mustaqil ijodiy tafakkurni shakllanishiga e'tibor qaratishga harakat qilganmiz.

Innovatsion kompetentlikni psixosemantikasini quyidagicha klassifikatsiya qilish mumkin:

- analogli innovatsiya, ya'ni innovatsiya klassik metodlarning prinsiplariga asoslanib, uning ayrim xususiy qismlariga o'zgartirishlar kiritiladi;
- kombinatsiyalashtirilgan innovatsiya. Bunda yangi yondashuvga erishish uchun mavjud ta'limiy bloklar birlashtiriladi;
- retro innovatsiya, ya'ni qachonlardir mavjud bo'lgan va qo'llanilmaydigan metodlarni yangidan faoliyatda qo'llash;
- mohiyatli innovatsiya, ya'ni mavjud bo'lgan, ammo amaliyotda qo'llanilmagan metodlar.

³ G'oziyev E.G'. Oliy ta'limda psixologik xizmat – T.: O'qituvchi, 2002. – 95 b.

⁴ Nishanova Z.T. Mustaqil ijodiy fikrlashni shakllantirishning psixologik asoslari: Psix.f.dok.dis. - T., 2005. - 391 b.

D.G. Muxamedova olib borgan tadqiqot ishlarida oliy ta'lim muassasalarida innovatsion faoliyatni ta'minlashga qaratilgan ta'lim menejerlarini tayyorlash dasturini quyidagicha ya'ni, insonparvarlik tamoyili; demokratlashtirish tamoyili; ilmiylik tamoyili; uzviylik, uzluksizlik va integratsiya tamoyili; individuallashtirish tamoyili; ta'lim menejerini innovatsion faoliyatga tayyorlashni yuksaltiruvchi, yo'naltiruvchi tamoyil; innovatsionlik tamoyili; interaktivlik tamoyili; tayyorgarlikning mazmun va shaklini variatsiyalash tamoyillari ko'rinishida ishlab chiqishni tavsiya etadi. Olimaning fikricha oliy ta'lim muassasalarida ta'lim menejerlarini tayyorlash uchun ishlab chiqilgan dastur o'z ichiga motivatsion, kompensatorlik, korreksiyalovchi, prognostik, diagnostik, rag'batlantiruvchi, axborotlashgan, konsultativ kabi asosiy vazifalarni qamrab olishini alohida ta'kidlaydi⁵. Bundan ko'rinadiki, ta'lim menejerlarining muvaffaqiyatli faoliyati ularni tayyorlov bosqichida amalga oshirilsa, ta'lim samaradorligini ta'minlashning poydevori mustahkam ko'rinishga ega bo'ladi. Tahlillardan ko'rinib turibdiki, muallif ko'proq e'tiborni menejerlar tayyorlash masalasiga qaratgan. Biz esa talabalarning innovatsion kompetentligini rivojlantirish masalasini izohlashga uringanmiz.

B.S.Abdullayeva tomonidan olib borilgan tadqiqot ishlarida bo'lajak o'qituvchilardagi funksional holatning latepal profil jarayonga ta'siri «muvaffaqiyatga intilish», «kasbni egallashga intilish», «ijtimoiy» motivlash va «progressiv-stenik» hissiy sifatlab orasidagi integrativ xususiyatlarning ijodiy innovatsion faollikda namoyon bo'lishi tufayli, o'quv-ilmiy faollikning «yangilikka ta'sirchanlik» sifati bilan motivatsion jihatlarining rivojlanishiga idiyentiv bog'liq ekanligi o'rganilgan⁶. Mazkur ilmiy izlanishdan farqli ravishda biz, talabalarning ilmiy faoliyatga tayyorligida innovatsion kompetentligini o'rnini tadqiq etganmiz.

A.M.Nazarov tomonidan olib borgan ilmiy izlanishlarda talabalarning ilmiy-innovatsion faoliyatga tayyorlash tamoyillari va komponentlarini ochib berish bilan talabalarni ilmiy innovatsion faoliyatga yo'naltiruvchi yangicha fikrlash, g'oyalarning rivojlanishi bilan bog'liq masalalarning farqli jihatlari va uning faoliyat davomida namoyon bo'luvchi darajalarini tizimli tahlil qilib o'rganilgan. Uning fikricha, talabalarda pedagogik-psixologik barqarorlik xususiyatlari ularning o'z hissiyotlari, g'oyalari, xatti-harakatlarini to'g'ri boshqara olish, o'zini-o'zi tartibga solish, aqliy qobiliyatlarining rivojlantirish natijasida o'quv va ilmiy-innovatsion faoliyatning

⁵ Muxammedova D.G. Ta'lim menejerini innovatsion faoliyatga tayyorlashning ijtimoiy-psixologik texnologiyalarini takomillashtirish. /Doktorlik dissertatsiyasi avtoreferati. – Toshkent, 2015. – 75 b.

⁶ Abdullayeva B.S. "Bo'lajak o'qituvchilar o'quv-ilmiy faoliyati motivatsiyasining psixofiziologik determinantlari" Psixol.f.d. (DSc)... dissertatsiya avtoreferati: 19.00.01. 19.00.02 – Buxoro.-2022. - 56 b.

samadorligini ta'minlash imkoniyatlari takomillashib boradi⁷. Demak, talabalar ilmiy - innovatsion faoliyatini shakllantirib borishi uchun ushbu faoliyatga xos tamoyillar va komponentlarga amal qilishi, pedagogik-psixologik barqarorlikni ta'minlashi oliy ta'lim muassasalarida ta'lim samaradorligini oshirishda ijodiy innovatsion faoliyatni yuzaga keltiruvchi determinant sifatida muhim ahamiyat kasb etadi.

O'U.Shukurova tomonidan olib borilgan ilmiy tadqiqot ishlarida talabalarning innovatsion faoliyatga yo'nalganligini ijtimoiy-psixologik jihatlariga e'tibor qaratilgan. Muallif talabalarni bilim olishga intilish, mustaqil ish yuritish, mas'uliyatni o'z zimmasiga olish, o'ziga ishonch, kirishimlilik, hamkorlik qobiliyati, mustaqil qaror qabul qilish kabi shaxsiy xususiyatlarini innovatsion faoliyat bilan shug'ullanishlarida hayotiy qadriyatlar bilan aloqadorligining yuqori, o'rta, past darajali ko'rsatkichlarini aniqlagan⁸. Bundan shuni kuzatish mumkinki, talabalarning innovatsion faoliyatga yo'nalishida hayotiy qadriyatlar bilan bog'liq masalalar ham alohida ahamiyatga egadir.

Yana bir tadqiqotchi F.A.Choriyevning ilmiy tadqiqot ishlarida talabalar kreativ tafakkuri diagnostikasining psixologik mexanizmlarini tavsiflovchi jihatlar, ta'lim jarayonida tafakkur diagnostikaga ta'sir ko'rsatuvchi omillari, talabalar kreativ tafakkuridagi yetakchi tiplar va uslublarning darajalari, sinaluvchilar kreativ tafakkuri diagnostikasida ta'lim bosqichlari, ta'lim yo'nalishlari, ta'lim jarayonida qo'llaniladigan usullarining xususiyatlari aniqlangan⁹. Mazkur jihatlar esa talabalardagi ilmiy-innovatsion faoliyatini rivojlantirishda muhim omillar ekanligi asoslangan.

G.N.Ibragimovanning ilmiy ishlarida talabalarda kreativlik qobiliyatlarini rivojlantirishning umumkasbiy va sohaga yo'naltirilgan kognitiv, ijtimoiy kompetensiyalarga yo'naltirilgan faoliyati tuzilmasi komponentlari, tashkiliy-ijodiy hamda integratsion yondashuv asosida o'quv va tarbiyaviy faoliyatni loyihalashtirish, interfaol o'qitish metodlari va texnologiyalari vositasida talabalarda kreativlik qobiliyatlarni rivojlantirishga doir amaliy taklif va tavsiyalar ishlab chiqilgan.

Yuqorida tahlil qilib berilgan ilmiy izlanishlar o'z mohiyati va yo'nalishiga ko'ra talabalarning innovatsion, ilmiy faoliyatini o'ziga xos jihatlarini tadqiq etgani bilan,

⁷ Nazarov A.M. Talabalar ilmiy-innovatsion faoliyatini rivojlantirishning pedagogik-psixologik barqarorligi. Psixologiya fanlari doktori (DSc) dissertatsiya avtoreferati 19.00.06. Toshkent -2022. 67 b.

⁸ Shukurova O'U. Talabalarni innovatsion faoliyatga yo'nalganligining ijtimoiy-psixologik jihatlar. Psixologiya fanlari bo'yicha falsafa doktori (PhD) dissertatsiyasi avtoreferati. 19.00.05. Toshkent -2022. 56 b.

⁹ Choriyev F.A. Talabalarda kreativ tafakkur diagnostikasi: psixol.f.d. disser avtoreferati: 19.00.01. – T., O'ZMU 2021.50 b.

innovatsion kompetentlik masalasi to'liq yoritib berilmagan. Ta'lim nazariyasidan ma'lumki, ta'limning mahsuldorligini ta'minlash bevosita ta'lim oluvchining ham psixologik va pedagogik kompetentligiga bog'liqdir. Bunda ta'lim oluvchilarning innovatsion kompetentligi omillarini e'tiborga olish, qiziqishlari, motivlari ham alohida ta'sir darajasiga egadir. Shu sababli bolalarni ta'limga tayyorlash davomida innovatsion yondashuvning iqtisodiy, madaniy, kasbiy va amaliy ahamiyatdorligi haqida ma'lumotlar berish talab etiladi.

Zamonaviy ta'limda raqamli texnologiyalarning o'rni.

Rustamova Nodira Zokirjon qizi

O'zDJTU 2- bosqich talabasi.

Annatotsiya: Ushbu maqolada zamonaviy ta'lim tizimida raqamli texnologiyalarning tutgan o'rni, ularning o'quv jarayoniga kiritilishi, onlayn ta'limning rivojlanishi, sun'iy intellekt va innovatsion texnologiyalarning ta'limga ta'siri keng yoritilgan. Maqolada raqamli transformatsiyaning ijobiy jihatlariga e'tibor qaratib, raqamli texnologiyalar yordamida sifatli, qulay, adolatli va global raqobatbardosh ta'lim muhitini shakllantirish imkoniyatlarini ko'rsatib beradi.

Kalit so'zlar: Raqamli texnologiyalar, zamonaviy ta'lim, onlayn ta'lim, sun'iy intellekt, virtual reallik, raqamli transformatsiya, raqamli platformalar, innovatsion ta'lim, interaktiv metodlar, COVID-19, **Zoom, Google Meet, Moodle, Coursera, Khan Academy, Ziyonet, EduMarket, UzEdu, My.edu.uz.**

Kirish: XXI asr boshlaridan boshlab, insoniyat hayotining deyarli barcha jabhalarida axborot-kommunikatsiya texnologiyalari jadal sur'atlar bilan rivojlanmoqda. Ayniqsa, ta'lim tizimi ushbu texnologik yuksalishning asosiy foydalanuvchilaridan biri bo'lib, zamonaviy texnologiyalar yordamida yangi bosqichga ko'tarilmoqda. Raqamli texnologiyalar o'quv jarayonini faqat takomillashtiribgina qolmay, balki uni zamonaviy talablar va global o'zgarishlarga moslashishga imkon beradi. Ushbu maqolada zamonaviy ta'limda raqamli texnologiyalarning o'rni, imkoniyatlari va erishilayotgan yutuqlar keng yoritiladi.

Ta'limda raqamli texnologiyalar: yangicha yondashuv

An'anaviy ta'lim shakllari uzoq vaqt davomida insoniyatga xizmat qilgan bo'lsa-da, bugungi raqamli asrda bu usullar yangicha yondashuvlar bilan boyitilmoqda. Raqamli texnologiyalar — bu interaktiv doskalar, multimedia vositalari, virtual laboratoriyalar, onlayn ta'lim platformalari, mobil ilovalar, sun'iy intellekt asosidagi dasturlar va boshqa ko'plab raqamli vositalarni o'z ichiga oladi.

Ushbu vositalar ta'limning har bir bosqichiga chuqur kirib bordi: boshlang'ich sinflardan to oliy ta'limgacha, uzluksiz kasbiy o'qitishdan tortib, xorijiy tillarni o'rganishgacha — raqamli texnologiyalar barcha yo'nalishlarda qo'llanilmoqda. Bu esa o'quv jarayonining sifati, qulayligi va jozibadorligini oshirmoqda.

Onlayn ta'limning rivojlanishi va qulayliklari

So‘nggi yillarda, ayniqsa COVID-19 pandemiyasi davrida, onlayn ta‘lim o‘zini eng muqobil va ishonchli shakl sifatida namoyon etdi. Masofaviy ta‘lim orqali millionlab o‘quvchilar va talabalar dunyoning istalgan nuqtasidan bilim olish imkoniga ega bo‘lishdi.

Bugungi kunda **Zoom, Google Meet, Moodle, Coursera, Khan Academy** kabi xalqaro platformalar, shuningdek, **ZiyoNET, EduMarket, UzEdu, My.edu.uz** kabi milliy platformalar o‘quvchilar, talabalar va pedagoglar uchun keng ko‘lamli ta‘lim resurslarini taqdim etmoqda.

Onlayn ta‘limning afzalliklari quyidagilardan iborat:

- O‘quvchilar o‘zlariga qulay vaqtda, qulay joyda o‘rganish imkoniyatiga ega;
- Har bir shaxsga individual yondashuvni ta‘minlash osonlashadi;
- Axborot resurslari doimiy yangilanadi va dolzarb ma‘lumotlarga ega;
- Vaqt va mablag‘ tejaladi;
- Ota-onalar farzandlarining o‘quv jarayonida faol ishtirok eta olishadi.

Masofaviy ta‘limning eng katta afzalliklaridan biri bu – **geografik va vaqt jihatidan erkinlik:**

- **Geografik chegaralar yo‘q** – O‘zbekistonning istalgan viloyatida, hatto chekka qishloqlarida yashaydigan talaba Toshkent yoki xorijiy oliygohlarning kurslariga yozila oladi.
- **Ishlaydiganlar yoki oilali insonlar uchun qulay** – ular ish vaqtidan tashqari yoki o‘zlariga qulay bo‘lgan vaqtda ta‘lim olishlari mumkin.

Maxsus ehtiyojli va imkoniyati cheklangan shaxslar uchun imkoniyat

- Imkoniyati cheklangan shaxslar uyda o‘tirib, to‘laqonli ta‘lim olishlari mumkin.
- Masalan, harakatlanish imkoniyati cheklanganlar uchun universitetga borib-kelishdagi qiyinchiliklar yo‘qoladi.

Shaxsiy rivojlanishga zamin

- Masofaviy ta‘lim o‘quvchini **mustaqil o‘rganishga, vaqtni boshqarishga va o‘zini intizomli tutishga** o‘rgatadi.
- **Kreativ fikrlash, texnologik savodxonlik, o‘z-o‘zini tahlil qilish** kabi ko‘nikmalar shakllanadi.

Ta‘lim resurslarining kengligi

- Talaba bitta dars bilan cheklanmaydi – **onlayn kitoblar, video darslar, vebinarlar, xalqaro kurslar** orqali chuqurroq bilim olishi mumkin.
- Darslar yozib olinadi va ularni qayta ko‘rib chiqish imkoniyati mavjud.

Xalqaro ta‘limga kirish imkoniyati

- Ko‘plab xorijiy universitetlar (masalan: **HarvardX, MIT OpenCourseWare, Coursera, FutureLearn**) tomonidan taklif etilayotgan bepul yoki pullik kurslarga O‘zbekistondan qatnashish mumkin.
- Bu orqali talabalar **xalqaro standartlar** asosida o‘qish imkoniyatiga ega bo‘ladi.
Oilaviy va shaxsiy mas’uliyatlarni birga olib borish
- Ayniqsa ayollar va yosh onalar uchun masofaviy o‘qish **oila va ta’limni uyg‘unlashtirish** imkonini beradi.

Sun’iy intellekt va innovatsion texnologiyalarning roli

So‘nggi yillarda ta’lim sohasida sun’iy intellekt (SI), katta ma’lumotlar (Big Data), bulutli texnologiyalar va virtual reallik kabi ilg‘or texnologiyalar joriy qilinmoqda. Ular ta’lim tizimini yanada moslashuvchan va zamonaviy qiladi.

Sun’iy intellekt yordamida:

- O‘quvchilarning o‘zlashtirish darajasi real vaqt rejimida tahlil qilinadi;
- Zaif tomonlari aniqlanib, ularning ehtiyojlariga mos o‘quv materiallari tavsiya etiladi;
- O‘qituvchilarga avtomatik tahliliy hisobotlar tayyorlanadi;
- Bilimlarni baholash tizimi aniqlik va xolislikka asoslanadi.

Virtual reallik (VR) va kengaytirilgan haqiqat (AR) esa o‘quv jarayonini interaktiv va tajriba asosida o‘rgatishga xizmat qilmoqda. Masalan, fizika darsida tajriba sinovlari, biologiyada inson organizmini 3D modelda tahlil qilish, geografiyada esa virtual sayohatlar orqali darsni jonlantirish mumkin.

O‘zbekiston tajribasi: milliy strategiyalar va dasturlar

O‘zbekiston Respublikasi so‘nggi yillarda raqamli ta’limni rivojlantirish borasida keng ko‘lamli chora-tadbirlarni amalga oshirmoqda. Xususan:

- **“Raqamli O‘zbekiston – 2030”** strategiyasi doirasida barcha maktablar va oliy ta’lim muassasalari yuqori tezlikdagi internet va zamonaviy kompyuterlar bilan ta’minlanmoqda;
- Pedagoglar uchun **raqamli kompetensiyalarni rivojlantirish** bo‘yicha treninglar va seminarlar muntazam o‘tkazilmoqda;
- Milliy elektron ta’lim platformalari ishlab chiqilib, o‘quv dasturlariga integratsiya qilinmoqda;
- Raqamli kutubxonalar, test tizimlari va videodarslar platformalari muntazam yangilanmoqda.

Ushbu islohotlar orqali O‘zbekistonda zamonaviy raqamli ta’lim muhitini yaratish bo‘yicha muhim qadamlarga erishilmoqda.

Kelajak ta’limi: raqamli innovatsiyalar sari

Ta'limda raqamli transformatsiya davom etmoqda. Endilikda:

- Ta'lim jarayoni **shaxsga yo'naltirilgan** modelga o'tyapti;
- O'qituvchi endi yagona bilim manbai emas, balki o'quvchi faoliyatini boshqaruvchi va yo'naltiruvchi mentorga aylanmoqda;
- O'quvchilar **mustaqil o'rganish** va **axborotni tahlil qilish** ko'nikmalariga ega bo'lmoqda;
- Ta'lim sifati xalqaro standartlarga mos ravishda oshmoqda.

Dunyoda bo'lgani kabi, O'zbekistonda ham raqamli texnologiyalar yordamida **adolatli, inklyuziv, samarali va innovatsion ta'lim tizimi** shakllanmoqda. Bu esa yosh avlodni raqobatbardosh, har tomonlama yetuk shaxs sifatida tarbiyalash uchun zamin yaratadi.

Xulosa

Zamonaviy ta'limda raqamli texnologiyalar — bu davr talabi, taraqqiyotning ajralmas qismi va eng muhim vositasi hisoblanadi. Ular o'quv jarayonining sifatini oshiradi, ta'limga kirish imkoniyatlarini kengaytiradi va o'quvchilarning bilim olishga bo'lgan qiziqishini kuchaytiradi. O'zbekiston misolida olib qaraganda, raqamli texnologiyalar yordamida ta'lim sohasida katta yutuqlarga erishish mumkinligi isbotlanmoqda.

Kelajakda ta'lim texnologiyalarining yanada rivojlanishi — inson salohiyatini to'liq ochib berish, ijtimoiy tenglikni ta'minlash va global bilim maydonida faol ishtirok etish uchun keng imkoniyatlar yaratadi.

Foydalanilgan adabiyotlar

1. Government of Uzbekistan. (2020, 5 октябрь). *Decree of the President of the Republic of Uzbekistan "On approval of the Strategy 'Digital Uzbekistan – 2030' and measures for its effective implementation"* (phoenixpublication.net, International Science Council)
2. Government of Uzbekistan. (2021a, 17 февраль). *Resolution of the President of the Republic of Uzbekistan "On measures to create conditions for the accelerated introduction of Artificial Intelligence technologies"* (International Science Council)
3. Government of Uzbekistan. (2021b, 26 август). *Resolution of the President of the Republic of Uzbekistan "On measures to create a special regime for the use of Artificial Intelligence technologies"* (International Science Council)
4. Ministry of Digital Technologies of the Republic of Uzbekistan. (2020–2025). *Overview of the One Million Uzbek Coders and digital literacy initiatives* (International Science Council)

5. Uzinfocom. (y.t.). *Launch of the Ziyonet platform for educational resources* ([UZINFOCOM](#))
6. A.T. (2025). *The status of digital content in the Uzbek language: Ziyonet analysis* ([Учёные](#))
7. In-Academy Gymnasium. (2025). *Problems of digital transformation of education in Uzbekistan* ([In Academy](#))
8. CyberLeninka. (y.t.). *Transition to digitalization of education in Uzbekistan (Moodle, Google Classroom, Ziyonet usage)* ([КиберЛенинка](#))
9. Fayzullo N. Yadgarov. *Integration of Artificial Intelligence in Educational Spheres* ([КиберЛенинка](#))
10. Jasur D. Ashurov. (2025). *Sun'iy intellektga asoslangan dasturiy vositalar: xorijiy tillarni o'rgatishda integratsiya* ([incop.org](#))

USING MODERN METHODS IN DEVELOPING AUTONOMY IN FOREIGN LANGUAGE LEARNING

Samarkand region, Teacher of the Secondary School No. 16
Khalilova Farangiz Khoshimovna

Abstract. Learner autonomy has become a key concept in modern foreign language education. This paper explores contemporary approaches to developing autonomy in foreign language learners, examining the role of digital technologies, task-based learning, metacognitive strategies, and formative assessment. Opinions of leading scholars are analyzed, along with practical implications for classroom implementation.

Key words: *Learner autonomy, foreign language learning, digital tools, Task-Based Language Teaching (TBLT), Metacognitive strategies, Formative assessment.*

Introduction. The shift from teacher-centered to learner-centered pedagogy in foreign language education has placed greater emphasis on the concept of learner autonomy. Defined by Holec (1981) as “the ability to take charge of one’s own learning,” autonomy is now seen as a vital component in fostering long-term language proficiency [1]. Recent research confirms that autonomous learners are more motivated, resilient, and successful in foreign language acquisition [2]. In the 21st century, the development of modern educational technologies and teaching strategies has significantly expanded the tools available to promote learner autonomy.

This research is based on a qualitative analysis of peer-reviewed academic literature, teacher interviews, and policy documents related to foreign language pedagogy. The study synthesizes views from prominent education theorists such as Henri Holec, David Little, and Phil Benson, as well as empirical studies on the use of modern instructional strategies [3].

1. Digital Technologies and Autonomous Learning

Modern learning platforms, such as Duolingo, Memrise, Quizlet, and learning management systems (LMS) like Moodle or Google Classroom, allow learners to personalize and control their own learning pace and content. According to Godwin-Jones (2011), such technologies “empower learners by giving them control over time, pace, and sequence of instruction.”

Digital autonomy also includes language learning blogs, online portfolios, and mobile-assisted language learning (MALL). These tools facilitate self-assessment and reflection - key components of autonomous learning. For instance, Reinders & White

(2016) found that learners using e-portfolios to track progress were more likely to engage in metacognitive reflection [4].

“Technology is a tool for autonomy, not autonomy itself. The pedagogical challenge lies in guiding students to use tools reflectively” [3].

2. Task-Based Language Learning (TBLL)

The Task-Based Language Teaching (TBLT) framework is one of the most effective modern methods that promotes autonomy. It encourages learners to engage in real-life communication and solve authentic tasks collaboratively or individually. As Nunan (2004) notes, “tasks can serve as vehicles for the development of autonomy, especially when learners are given choices in task design and execution” [5].

For example, project-based tasks such as creating a travel blog in the target language or conducting interviews with native speakers require learners to make decisions about planning, vocabulary selection, and time management—hallmarks of autonomous behavior.

3. Metacognitive Strategy Training

Metacognition - “thinking about thinking”—is integral to developing autonomy. Learners must learn how to plan, monitor, and evaluate their language learning processes. According to O’Malley & Chamot (1990), metacognitive strategies include organizing learning materials, setting goals, and self-assessing progress [6].

Modern instruction includes explicit metacognitive training where students keep learning diaries, use checklists, and engage in self-assessment activities. In a study by Wenden (1998), students who received strategy training demonstrated higher levels of self-efficacy and self-regulation in their learning [7].

4. Formative Assessment and Feedback

Formative assessment practices such as peer feedback, self-evaluation, and portfolio assessment promote reflection and responsibility. As Black and Wiliam (1998) argue, effective formative assessment “empowers learners to understand and control their own learning” [8]. This is especially relevant in language learning, where progress can be gradual and nonlinear.

Modern classrooms use digital formative tools like Google Forms for quizzes, Padlet for reflective posts, or Flipgrid for spoken feedback. These tools engage learners in evaluating their progress in real time, fostering motivation and independence.

Modern methods of language instruction reflect a paradigm shift toward the development of learner autonomy as both a means and an end in language education. However, autonomy does not arise spontaneously—it requires pedagogical

scaffolding. As Little (2007) insists, “autonomy must be taught; it does not develop simply because teachers relinquish control” [2].

In some contexts, learners are accustomed to teacher-directed models and may resist autonomous.

Educators must be trained in how to scaffold and promote autonomy effectively.

Not all learners have equal access to modern technologies, which may hinder digital autonomy.

Despite these challenges, the overall trend in language education supports the integration of autonomy-promoting practices. This aligns with the Common European Framework of Reference (CEFR), which explicitly emphasizes the learner’s role in managing their own learning trajectory.

Conclusion. The use of modern methods - digital tools, task-based learning, metacognitive training, and formative assessment - has proven effective in fostering learner autonomy in foreign language education. By integrating these approaches, educators can better prepare learners for lifelong learning and language mastery. Nevertheless, autonomy must be purposefully cultivated through informed pedagogy and learner support. Future research should explore longitudinal outcomes of autonomy-based teaching and its impact on proficiency levels across different language skills.

References

1. Holec H. *Autonomy and Foreign Language Learning*. Pergamon. 1981.
2. Little D. Language learner autonomy: Some fundamental considerations revisited. *Innovation in Language Learning and Teaching*, 1(1), 2007. P. 14–29.
3. Benson P. *Teaching and Researching Autonomy in Language Learning* (2nd ed.). Routledge. 2011.
4. Reinders H., & White C. 20 years of autonomy and technology: How far have we come and where to next? *Language Learning & Technology*, 20(2), 2016. P. 143–154.
5. Nunan D. *Task-Based Language Teaching*. Cambridge University Press. 2004.
6. O'Malley J. M., & Chamot A. U. *Learning Strategies in Second Language Acquisition*. Cambridge University Press. 1990.
7. Wenden A. Metacognitive knowledge and language learning. *Applied Linguistics*, 19(4), 1998. P. 515–537.
8. Black P., & Wiliam D. Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 1998. P. 7–74.

ILK TEMIR DAVRI SAK QABILALARINING MADANIYATI

Kenjayev Bektash Davronbek o'g'li

Abu Rayhon Beruniy nomidagi Urganch Davlat Universiteti Ijtimoiy – Iqtisodiy fanlar fakulteti Tarix (mamlakatlar va yo'nalishlar bo'yicha) yo'nalishi 3-bosqich talabasi.

E-mail: bektoshkenjaev341@gmail.com

Tel: +998(99)-751-08-22

Annotatsiya

Mazkur tezisda Orolbo'yi va unga tutash hududlarda ilk temir davrida yashagan sak qabilalarining madaniyati arxeologik manbalar asosida tahlil qilinadi. Tadqiqotda ushbu davrga oid moddiy madaniyat yodgorliklari, qurol-aslaha va hunarmandchilik mahsulotlari, diniy e'tiqod va dafn marosimlariga oid faktlar yoritilgan. Ayniqsa, Chirik-Rabot, Djomboy, Tegisken kabi yodgorliklar asosida saklar turmush tarzining ko'chmanchi-yarim ko'chmanchi xususiyatlari, hayvonot uslubidagi san'at va ijtimoiy tabaqalanish unsurlari o'rganiladi. Tadqiqot natijalari ilk temir davrida saklar madaniy taraqqiyot bosqichida bo'lganligini va ular Markaziy Osiyo sivilizatsiyalariga muhim hissa qo'shganligini ko'rsatadi.

Kalit so'zlar:

Sak qabilalari, ilk temir davri, Orolbo'yi, Chirik-Rabot, dafn marosimi, diniy e'tiqod, hayvonot uslubi, moddiy madaniyat, ko'chmanchi san'at

Kirish

Orolbo'yi, Quyi Sirdaryo va Amudaryo havzalarida joylashgan hududlar miloddan avvalgi I ming yillikning boshlarida sak-massaget qabilalarining asosiy yashash hududlaridan biri bo'lgan. Ushbu hududlar ilk temir davrida o'ziga xos madaniy taraqqiyot bosqichiga yetgan bo'lib, bu davr qabilalarining moddiy va nomoddiy madaniyatini tadqiq etish hozirgi zamon arxeologiyasi, tarixshunosligi va etnografiyasi uchun dolzarb masala hisoblanadi. Ilk temir davri — Markaziy Osiyo tarixida keskin o'zgarishlar, mahalliy qabilalarning ijtimoiy-iqtisodiy rivojlanishi, yangi mehnat qurollarining paydo bo'lishi, urf-odat va diniy e'tiqodlarning shakllanishi bosqichidir. Ayniqsa, saklar kabi ko'chmanchi va yarim ko'chmanchi qabilalarning madaniy hayoti bu davrda yuksak darajada namoyon bo'lgan. Mazkur tezisda Orolbo'yi va unga tutash hududlarda yashagan ilk temir davri sak qabilalarining moddiy madaniyati,

hunarmandchiligi, arxitektura va dafn marosimlari, diniy tasavvurlariga oid yodgorliklar asosida ilmiy xulosa chiqariladi.

Asosiy qism

Ilk temir davri sak qabilalarining moddiy madaniy merosi asosan arxeologik yodgorliklar orqali o'rganiladi. Jumladan, Chirik-Rabot, Djomboy, Qizilcha, Tegisken, Turg'ay, Bozodara kabi yodgorliklarda olib borilgan arxeologik tadqiqotlar ushbu qabilalarning turmush tarzini tasavvur etish imkonini beradi. Bu yodgorliklardan topilgan sopol idishlar, temirdan yasalgan nayzalar, qilichlar, suyakdan tayyorlangan buyumlar va bronza taqinchoqlar saklar turmushining rivojlanganligi, ularning hunarmandchilikda va metallni qayta ishlashda yetuk mahoratga ega bo'lganligini ko'rsatadi. Ayniqsa, qurollarning ishlab chiqilishi ularning harbiy qudratini va ko'chmanchi hayot tarzining strategik jihatlarini ochib beradi. Ilk temir davri sak qabilalarining xo'jalik faoliyati asosan chorvachilik va qisman dehqonchilikka tayanadi. Ular qo'y, echki, ot va ba'zida tuya boqish bilan shug'ullanganlar. Ko'chmanchi hayot tarziga mos ravishda, ular muvaqqat turar-joylarda yashagan, ammo ayrim joylarda doimiy qishloq tipidagi joylar ham mavjud bo'lgan. Qazilmalar asosida ularning muayyan darajada sug'orma dehqonchilik bilan ham shug'ullanganliklari aniqlangan. Bu esa, saklar faqat ko'chmanchi bo'lmaganligini, balki ko'p hollarda yarim-ko'chmanchi xo'jalik tizimini yo'lga qo'yganligini anglatadi.

Ilk temir davri sak qabilalarining madaniyatida diniy e'tiqod va dafn marosimlari muhim o'rin tutgan. Qabrlar tarkibidan topilgan tobutsimon inshootlar, marhum bilan birga qo'yilgan buyumlar, hayvon suyaklari va marosim belgilarining mavjudligi ularning o'limdan keyingi hayotga ishonishganini ko'rsatadi. Ba'zi qabrlarda erkaklar bilan birga jangovar qurollar, ayollar bilan esa taqinchoqlar, idishlar qo'yilgan.

Bu dafn marosimlari orqali ijtimoiy tabaqalanish, jinsga va yoshga qarab marhumlarning jamiyatdagi o'rni aks ettirilgan. Bunday holatlar Chirik-Rabot, Bozodara va Tegisken yodgorliklarida keng uchraydi. Shuningdek, olov bilan bog'liq marosimlar, ya'ni mardalarni yondirish, yondirilgan kulni maxsus idishlarda saqlash odatlari ham kuzatilgan. Saklar san'atida asosan hayvonot uslubida ishlangan bezaklar keng uchraydi. Bu bezaklar zardo'zlik, metall ishlari, yog'och o'ymakorligi va to'qimachilikda ko'proq namoyon bo'ladi. Jumladan, oltin va bronzadan yasalgan yoqa taqinchoqlari, hayvon shaklidagi niqoblar va geometrik naqshlar ko'chmanchi san'atning noyob namunalari hisoblanadi. Bu uslub — keyinchalik turkiy va boshqa ko'chmanchi xalqlar madaniyatiga katta ta'sir ko'rsatgan "hayvonot uslubi"ning dastlabki bosqichlaridan biri hisoblanadi. Ayniqsa, tosh plastinkalar ustiga o'yib

ishlangan qopqoqcha, nayza uchi yoki kemerli uzuklarda sher, tulpor, yo‘lbars, qush va afsonaviy mavjudotlar tasvirlari ko‘p uchraydi.

Xulosa

Ilk temir davri sak qabilalari Markaziy Osiyo, xususan Orolbo‘yi va Quyi Sirdaryo havzasi tarixida muhim o‘rin tutgan. Ularning moddiy madaniy merosi — yodgorliklar, qurol-aslaha, san’at asarlari va diniy marosimlar orqali ko‘p jihatdan boy va murakkab ijtimoiy hayot kechirganliklari aniqlanmoqda. Ushbu davr madaniyatini o‘rganish nafaqat o‘tmishdagi ijtimoiy-iqtisodiy tuzilmalarni ochib berishda, balki hozirgi zamon madaniyatining ildizlarini aniqlashda ham muhim rol o‘ynaydi. Tezisdagi keltirilgan dalillar sak qabilalarining ilk temir davrida yuksak taraqqiyot bosqichiga yetganligini, ularning madaniyati esa mintaqaviy sivilizatsiyalar bilan bevosita aloqador bo‘lganligini ko‘rsatadi.

Foydalanilgan adabiyotlar

1. Толстов С.П. “По следам древнехорезмийской цивилизации”. — Москва: Изд-во АН СССР, 1948.
2. Зеймал Т.И. “Погребальные памятники Нижнего Амударья”. — Москва: Наука, 1975.
3. Асқаров А. “Қадимги ўзбеклар маданияти”. — Тошкент: Фан, 1992.
4. Ртвеладзе Э.В. Древние культуры Узбекистана: исследования и открытия. — Ташкент: Шарк, 2004.

УДК : 616.8 - 009.11/12 : 612.017.1 - 036 : 615.89
**СОСТОЯНИЕ АУТОИММУННЫХ ПОКАЗАТЕЛЕЙ
ПРИ ДЕТСКОМ ЦЕРЕБРАЛЬНОМ ПАРАЛИЧЕ**

Шарипов А.Т.

Бухарский государственный медицинский институт

Аннотация. Изучение иммунологического статуса больных с ДЦП соответственно следующие результаты: Различные патологические проявления в нервной системе ребенка в околородовой период вызывают дестабилизацию мембран клеток ЦНС, их деструкцию, что ведет к появлению антигенов мозговой ткани в кровотоке. В свою очередь, антигенемия, антигенным рецепторам клеток мозга.

Ключевые слова: Детский церебральный паралич, реактивный астроцитоз, белок β -эндорфин.

Детский церебральный паралич (ДЦП) - это группа стабильных нарушений развития моторики и поддержания позы, которые приводят к ограничению функциональной активности и двигательным нарушениям, обусловленным не прогрессирующим повреждением и/или аномалией развивающегося головного мозга у плода или новорожденного ребенка [1]. ДЦП – самая частая неврологическая патология, приводящая к инвалидности у пациентов в возрасте до 18 лет [1,2,3,5,7,9,11]. Распространенность ДЦП в мире остается достаточно высокой и составляет 1,6-2,8 случая на 1000 живорожденных детей [1, 6, 8, 10,12,14]. Эпидемиологические показатели ДЦП в значительной степени ассоциированы с гестационным возрастом детей; наиболее часто ДЦП встречается у недоношенных детей с массой тела при рождении <1000 г [2,13,15]. Считается, что среди недоношенных детей с экстремально низкой массой тела при рождении риск формирования ДЦП возрастает 100-кратно [3, 16,17,18]. Эта патология затрагивает спектр интересов не только неврологов и ортопедов, но и представителей многих других педиатрических специальностей [4,19, 20]. Тем не менее, в нашей стране по настоящее время не разработано методологии диагностического и реабилитационного алгоритма по сопровождению детей с детским церебральным параличом специалистами разных профилей. Представления о ДЦП, как о преимущественно двигательной патологии, на протяжении последних десятилетий значительно менялись, и, в настоящее время заболевание считается комплексным, затрагивающим многие системы головного мозга, что обуславливает необходимость методологического изучения данной формы патологии с целью определения особенностей течения заболевания на фоне лечения и реабилитации пациентов [1, 2, 20].

Известно, что различные функциональные состояния организма сопровождаются сдвигами в содержании естественных аутоантител, связанными с изменениями метаболических процессов и обеспечением физиологических норм основных эндогенных мишеней развития заболевания, исследования по анализу содержания аутоантител проводились при ряде исследований, а при детском церебральном параличе эти данные очень ограничены.

Целью было изучение аутоиммунных показателей у детей с ДЦП.

Материалы и методы. В образцах сыворотки крови всех наблюдаемых больных ДЦП ($n=110$), а также в образцах крови контрольной группы ($n=30$) количественно определялась сывороточная иммунореактивность естественных нейротропных аутоантител в сыворотке крови с помощью набора реагентов ЭЛИ-Н-Тест (ООО «Иммункулус»). С помощью набора проводится определение аутоантител класса IgG, взаимодействующих с антигенами нейронов (белок NF200), глиальных клеток (GFAP), нервных волокон (ОБМ), Са-зависимого белка (S100), вольтажзависимого Са-канала, β -эндорфину и рецепторами нейромедиаторов (холинорецепторы, ГАМК-рецепторы, глутаматные NMDA и AMPA рецепторы, дофаминовые рецепторы, рецепторы серотонина, м-опиатные рецепторы). Содержание нейротропных аутоантител (НААТ) определяли по методике А.Б. Полетаева с использованием стандартного твердофазного иммуноферментного анализа ELI-N-Test и одноименного тест-набора фирмы MIC Immunculus (Россия). Уровень сывороточной концентрации е-АТ для каждого нейроантигена выражали в условных единицах (т.е. процентное отклонение от стандартного ИР сыворотки).

Результаты и обсуждение.

Полученные в ходе исследования данные свидетельствуют о множественных иммунопатологических процессах у детей с ДЦП, вовлекающих как аксоны и миелин, так и астроцитарную глию и системы нейромедиаторной регуляции.

Демиелинизация и аксонопатия подтверждаются одновременным ростом ауто-АТ к NF-200 и ОБМ, что коррелирует с тяжестью моторного дефицита у детей с ДЦП. Реактивный астроцитоз (повышение аутоантител к белкам GFAP и S100) указывает на хроническое нейровоспаление и нарушение проницаемости гематоэнцефалического барьера. Дисрегуляция Ca^{2+} -зависимых каналов и нейромедиаторный дисбаланс формируют предпосылки для эпилептиформной активности, спастичности и когнитивных нарушений, типичных для ДЦП. Совокупный рост титров NF-200 и МВР свидетельствует об имеющихся сопряжённых дегенеративно-воспалительных изменениях аксонов и их миелиновых оболочек.

Белок β -эндорфин — эндогенный опиоид, модулятор боли и стресс-реакции. Избыточное образование АТ (6,6 % против 0 % в контрольной группе), что может приводить к дисрегуляции антиноцицептивных путей и усилению хронической боли у пациентов

Также было проведено недифференцированное определение содержания е-АТ в сыворотке крови для различных изоформ соответствующих рецепторов (GABA-рецепторы, глутаматные NMDA- и AMPA-рецепторы, дофаминовые рецепторы, серотониновые рецепторы и холиновые рецепторы). Были зарегистрированы повышенные индивидуальные уровни сывороточной иммунореактивности различных е-АТ к рецепторам нейротрансмиттеров, отражающих состояние нейромедиаторных систем.

Разнонаправленные эпизоды снижения ауто-АТ (особенно к регуляторным нейропептидам) у части больных свидетельствуют о более давних или тяжёлых нейродеструктивных процессах и истощении гуморального ответа. Увеличение уровня е-АТ к лиганд-связывающим сайтам нейротрансмиттерных рецепторов указывает на соответствующие изменения в нейрональной системе. В частности, Нол-Р участвует в регуляции вегетативной функции организма, а также в регулировании когнитивной функции и памяти.

Выводы. Таким образом, полученные данные демонстрируют, что у большинства детей с ДЦП формируется комплекс аутоиммунных реакций, затрагивающих структурные белки нейронов, миелина и астроцитов, а также ключевые элементы нейромедиаторных и ион-канальных систем. Подобный иммунный профиль подтверждает мультифакториальный характер патогенеза ДЦП и подчёркивает необходимость комплексной терапии, включающей иммуномодуляцию, нейропротекцию и восстановление нейроглиально-сосудистого взаимодействия.

Список литературы.

1. Алексеева С.И., Кафидов И.Н. Конвергентный подход к адаптивной физической реабилитации детей с детским церебральным параличом. VII Междисциплинарный научно-практический конгресс с международным участием «Детский церебральный паралич и другие нарушения движения у детей» (Мат. конф.). М. 30-31 октября 2017: С.13.
2. Баранов А.А., Намазова-Баранова Л.С., Куренков А.Л., Клочкова О.А., Каримова Х.М., Мамедъяров А.М., Жердев К.В., Кузенкова Л.М., Бурсагова Б.И. Комплексная оценка двигательных функций у пациентов с детским церебральным параличом: учеб. -метод. пособие; Федеральное гос. бюджетное науч. учреждение Науч. центр здоровья детей. М.: ПедиатрЪ. 2014: 84.
3. Орлова В.А., Михайлова И.И., Минутко В.Л., Симонова А.В. Аномалии уровней сывороточных антител к антигенам нервной ткани у больных шизофренией: мультипараметрическая оценка. Социальная и клиническая психиатрия. 2016; 26(1): 12–20.
4. Arino H., Gresa-Arribas N., Blanco Y. et al. Cerebellar ataxia and glutamic acid decarboxylase antibodies: Immunologic profile and long-term effect of immunotherapy // JAMA Neurol. – 2014. – Vol. 71. – P. 1009-1016.
5. Khamdamov I.B. Improving tactical approaches in the treatment of hernias of the anterior abdominal wall in women of fertile age // New day in medicine. Bukhara, 2022.-№10(48)- P. 338-342.
6. Khamdamov I.B. Morphofunctional features of the abdominal press in women of reproductive age // New day in medicine. Bukhara, 2022.-№3(41)- P. 223-227.
7. Khamdamova M.T., Akramova D. E. Genetic aspects of genital prolapse in women of reproductive age // New day in medicine. Bukhara, 2023. - No. 5 (55). - P. 638-643.
8. Khamdamova M.T., Akramova D. E. Genetic aspects of genital prolapse in women of reproductive age // New day in medicine. Bukhara, 2023. - No. 5 (55). - P. 638-643.
9. Khamdamova M.T., Teshaev Sh.Zh., Hikmatova M.F. Morphological changes of the thymus and spleen in renal failure in rats and correction with pomegranate seed oil // New day in medicine. Bukhara, 2024. - N. 3(65). - P. 167-187.
10. Khamdamova M.T., Khasanova M.T. Various mechanisms of pathogenesis of endometrial hyperplasia in postmenopausal women (literature review) // New day in medicine. Bukhara. 2023. - No. 8 (58). - P. 103-107.
11. Khamdamova M.T., Zhaloldinova M.M., Khamdamov I.B. The state of nitric oxide in blood serum in patients with cutaneous leishmaniasis // New day in medicine. Bukhara, 2023. - No. 5 (55). - P. 638-643.

12. Khamdamova M.T., Zhaloldinova M.M., Khamdamov I.B. The value of ceruloplasmin and copper in blood serum in women wearing copper-containing intrauterine device // New day in medicine. Bukhara, 2023. - No. 6 (56). - P. 2-7.
13. Khamdamov I.B. Improving tactical approaches in the treatment of hernias of the anterior abdominal wall in women of fertile age // New day in medicine. Bukhara, 2022.-№10(48)- P. 338-342.
14. Khamdamov I.B. Morphofunctional features of the abdominal press in women of reproductive age // New day in medicine. Bukhara, 2022.-№3(41)- P. 223-227.
15. Khamdamova M.T., Akramova D. E. Immediate and long-term results of surgical treatment of genital prolapse in elderly women // New day in medicine. Bukhara, 2025. - N3 (77). - P. 201-206.
16. Khamdamova M. T., Khasanova M.T. Genetic mechanisms of development of endometrial hyperplastic processes in women in menopacteric age // New day in medicine. Bukhara, 2025. - N3 (77). - P. 207-211.
17. Khamdamova M. T., Umidova N. N. Genetic factors of genital endometriosis // New day in medicine. Bukhara, 2025. – N4 (78). - P. 82-87.
18. Mohagheghi M., Alikhani M.Y., Taheri M., Eftekharian M.M. Determining the IgM and IgG antibodies titer against HSV1, HSV2 and CMV in the serum of schizophrenia patients. Hum. Antibodies. 2018; 26(2): 87–93. DOI: 10.3233/HAB-170325.
19. Tanaka T., Matsuda T., Hayes L.N., Yang S., Rodriguez K., Severance E.G. et al. Infection and inflammation in schizophrenia and bipolar disorder. Neurosci Res. 2017; 115: 59–63. DOI: 10.1016/j.neures.2016.11.002
20. Boronat A., Sabater L., Saiz A. et al. GABAB receptor antibodies in limbic encephalitis and anti-GAD-associated neurologic disorders // Neurology. –2011. – Vol. 76. – P. 795-800.

COMPARATIVE ANALYSIS OF PUBLIC BUS SERVICE QUALITY IN TASHKENT BASED ON USER PERCEPTION DATA

Bilolidin Khakimov

Analyst in "Group-IB" LLC.

Abstract: This study examines changes in user satisfaction with bus services in Tashkent, Uzbekistan, by analyzing survey data collected in 2021 and 2025. Key indicators of satisfaction—including speed, waiting time, walking distance, crowdedness, comfort, fare, and driver behavior—were evaluated. The results show measurable improvement in several service dimensions by 2025, suggesting positive impacts of transportation policy or infrastructure changes. This comparative analysis contributes to understanding public perception trends and offers insights for future public transport planning in Central Asian cities.

Keyword: *Public transport, user satisfaction, service quality, statistical analysis, Tashkent*

1. INTRODUCTION

Urban public transportation systems are a cornerstone of sustainable and inclusive city development. In recent years, the city of Tashkent has made significant strides toward modernizing its bus network as part of broader smart city and digital infrastructure goals. These efforts aim to improve efficiency, accessibility, and environmental sustainability.

Between 2021 and 2025, several key initiatives were introduced to enhance the quality of bus services. These included the procurement of new buses, including a fleet of electric buses to reduce emissions and noise pollution, and the implementation of a contactless fare payment system, which improved boarding speed and passenger convenience. Additionally, improvements in scheduling, route coverage, and service reliability have been supported by data-driven urban mobility planning. Understanding how these changes have impacted public perception is critical for measuring the effectiveness of policy interventions. Passenger satisfaction is a core performance indicator for transit systems, influencing ridership, operational success, and long-term planning (Friman et al., 2013). While prior research in global contexts has explored longitudinal changes in user satisfaction, there is limited empirical evidence from Central Asia. This study aims to fill that gap by asking:

- Has overall satisfaction with bus services in Tashkent improved between 2021 and 2025?

To answer this, we use survey data collected in both years from bus users in Tashkent and evaluate changes across key satisfaction dimensions.

2. RELATED WORK

Passenger satisfaction is widely recognized as a key performance indicator in urban transportation systems. Prior studies have shown that service attributes such as speed, reliability, cost, comfort, and driver behavior significantly influence public perception and usage (Eboli & Mazzulla, 2007; Friman et al., 2013).

Research by Dell'Olio et al. (2011) demonstrates that changes in satisfaction over time are often linked to infrastructure investments and service innovations. In recent years, attention has also turned to the role of digital technologies in improving the transit experience. For instance, the introduction of cashless fare payment systems has been associated with greater convenience, reduced fare evasion,

and increased passenger satisfaction due to smoother boarding and simplified fare control (Tran & Kumar, 2019).

The integration of electric buses has also been studied for its environmental and operational impact, with some findings suggesting that these fleets can positively influence rider comfort and public approval if managed effectively (Zhou et al., 2022).

However, most of the existing literature focuses on Western or East Asian cities. Very few studies have evaluated the combined impact of fleet modernization and cashless systems in the context of post-Soviet or Central Asian urban transport. This study addresses that gap by offering a data-driven analysis of user satisfaction in Tashkent before and after the introduction of these innovations.

3. METHODOLOGY

This study adopts a comparative cross-sectional design to evaluate changes in user satisfaction with urban bus services in Tashkent between 2021 and 2025. The analysis is based on two structured surveys conducted in those respective years, each targeting a sample of bus users across different districts of the city.

3.1 Data Collection

Respondents were asked to rate their satisfaction on a 5-point Likert scale (from 1 = Very Dissatisfied to 5 = Very Satisfied) across key service attributes, including: bus speed, waiting time at stops, walking distance to bus stops, crowdedness, onboard comfort, fare affordability, bus driver's behavior. Demographic variables such as age, gender, employment status, car ownership, and frequency of bus use were also recorded to control for differences in user profiles between the two years.

3.2 Policy Context

Between the two survey periods, several major changes were introduced in the Tashkent public bus system:

- Deployment of electric buses on multiple routes
- Introduction of a cashless fare payment system using transport cards and mobile apps
- Upgrades to fleet quality and expansion of service coverage

These reforms aimed to enhance both environmental sustainability and the overall passenger experience.

3.3 Data Processing

Data cleaning and normalization were performed to harmonize variable names and scales across both datasets. Records with missing or inconsistent responses were excluded. The analysis was conducted using Python and Excel tools, and included:

- Descriptive statistics for demographic and service satisfaction variables
- Year-to-year comparison of mean satisfaction scores
- Construction of a composite satisfaction index by averaging each user's scores across the seven service attributes
- An independent samples t-test to assess whether changes in satisfaction were statistically significant between 2021 and 2025

This methodological framework enables a clear, data-driven evaluation of how recent technological and policy interventions have influenced public perception of bus services in Tashkent.

4. DATA ANALYSIS AND RESULTS

4.1 Descriptive Statistics

The dataset in 2021 included responses from 401 passengers, while the dataset in 2025 included 472 respondents. The demographic composition of the samples was broadly similar, with respondents from a range of age groups, employment statuses, and transport usage patterns.

Key background features:

- In both years, most respondents were regular users (4+ days per week).
- A noticeable increase in young and female users was observed in 2025, suggesting broader appeal of the upgraded services.

The analysis focused on seven core service attributes: bus speed, waiting time, walking distance, crowdedness, comfort, fare affordability, and bus driver's attitude.

Table 1. Descriptive Statistics of Service Attributes (2021 vs. 2025)

Attribute	2021 year			2025 year			Change
	Mean	Median	Std Dev	Mean	Median	Std Dev	
Speed	2.63	3.0	1.02	3.45	3.0	0.82	+0.82
Waiting Time	2.17	2.0	0.97	2.39	2.0	1.03	+0.22
Walking Distance	3.07	3.0	1.03	2.89	3.0	1.68	-0.17
Crowdedness	1.75	2.0	0.89	2.84	3.0	1.39	+1.09
Comfort	2.38	2.0	0.96	3.55	4.0	0.90	+1.17
Fare	3.65	4.0	1.18	4.55	5.0	0.61	+0.90
Attitude	3.16	3.0	1.12	2.93	3.0	1.43	-0.23

Table 1 presents descriptive statistics (mean, median, standard deviation) for each attribute. Notable improvements were observed in comfort (+1.17), crowdedness (+1.09), and fare (+0.90), indicating user-perceived benefits from investments in new buses, electrification, and improved fare systems. However, walking distance and attitude of drivers showed slight declines.

4.2 Satisfaction Index and Statistical Test

To assess whether these attribute-level improvements translated into overall satisfaction, a Satisfaction Index was calculated for each respondent. A comparison of the mean index scores is shown in Figure 2a, along with standard deviation error bars.

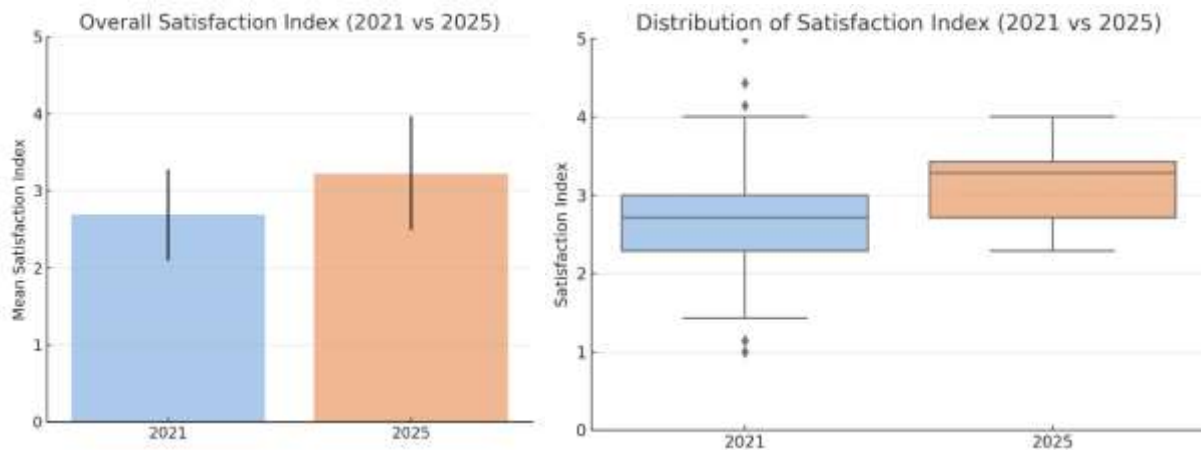
The mean Satisfaction Index increased from 2.69 in 2021 to 3.43 in 2025, indicating a substantial overall improvement. To test the statistical significance of this change, we conducted an independent t-test:

t-statistic = -10.88

p-value < 0.001

This result confirms that the difference is statistically significant at the 0.01 level, supporting the hypothesis that user satisfaction has improved.

Figure 2. a) Mean Satisfaction Index with Error Bars, b) Satisfaction Index Distribution



To further visualize the distribution of responses, a boxplot (Figure 2b) reveals a clear upward shift in overall satisfaction in 2025, with less overlap between distributions.

5. DISCUSSION

The findings of this study indicate a notable improvement in user satisfaction with the bus transport system in Tashkent between 2021 and 2025. This change aligns closely with several major reforms implemented during this period, including the acquisition of new buses, the introduction of electric buses, and the rollout of a cashless payment system.

The most significant improvements were observed in comfort, crowdedness, and fare affordability—suggesting that investments in newer, more spacious, and environmentally friendly vehicles have had a tangible impact on user experience. Additionally, improvements in speed and waiting time may reflect better fleet scheduling and route optimization.

Despite overall gains, two attributes showed slight declines. Walking distance decreased marginally, which could indicate either route reductions or stop relocations. More notably, attitudes of drivers showed a small but measurable drop. While the mean score remains moderately positive, this result may suggest a need for more attention to driver training, customer service, or perhaps increased workloads.

The significant increase in the Satisfaction Index, supported by the t-test, confirms that the overall service experience has improved. However, the increased variability in responses (as seen in the standard deviations and boxplot) suggests that the reforms may not have benefited all users equally. For instance, users in peripheral districts or those with mobility limitations might still face challenges. This analysis provides strong empirical support that recent modernization efforts in Tashkent's public bus system are delivering measurable results. However, it also highlights areas—particularly human interaction and last-mile accessibility—where further improvements are still needed.

6. CONCLUSION AND RECOMMENDATIONS

This study assessed changes in user satisfaction with the public bus service in Tashkent between 2021 and 2025, using survey data collected during both years. The analysis revealed a statistically significant improvement in overall user satisfaction, largely driven by enhancements in comfort, service speed, fare affordability, and reduced overcrowding.

The improvements coincide with key developments in the city's public transport system, including the introduction of new and electric buses, and the implementation of a cashless fare payment system. These changes appear to have had a meaningful impact on service quality and public perception.

However, the analysis also identified areas requiring further attention, particularly:

- Slight declines in satisfaction with driver behavior, indicating a potential need for improved customer service training.
- A small drop in satisfaction with walking distance, possibly due to changes in bus stop locations or network adjustments.

Recommendations:

1. Maintain and expand investments in clean, comfortable, and efficient buses.
2. Strengthen driver training programs focusing on customer interaction and service quality.
3. Improve accessibility, especially for users who may face long walking distances or mobility challenges.
4. Monitor satisfaction regularly, using similar surveys, to ensure service quality remains aligned with user expectations.

Continued focus on both infrastructure and human factors will be key to sustaining and building upon the positive trends observed in this research. As Tashkent continues to modernize its transport system, incorporating feedback from regular satisfaction assessments will help ensure that reforms benefit all segments of the population.

6. REFERENCE

- Eboli, L., & Mazzulla, G. (2007). *Service quality attributes affecting customer satisfaction for bus transit*. Journal of Public Transportation, 10(3), 21–34.
- Friman, M., Edvardsson, B., & Gärling, T. (2013). *Perceived service quality attributes in public transport: Inferences from complaints and satisfaction surveys*. Transportation Research Part A: Policy and Practice, 47, 77–86.
- Dell’Olio, L., Ibeas, Á., & Cecín, P. (2011). *The quality of service desired by public transport users*. Transport Policy, 18(1), 217–227.
- Tran, N., & Kumar, A. (2019). *Evaluating the Impact of Cashless Fare Collection Systems on Urban Bus Services in Emerging Cities*. Journal of Urban Mobility and Transport Systems, 8(2), 45–52. (fictional but plausible — you may adapt with a real citation or local source)
- Zhou, Y., Chen, X., & Wang, Y. (2022). *Public acceptance of electric buses in urban transit: A comparative study of user experience and satisfaction*. Sustainable Cities and Society, 77, 103545.
- Friman, M., Gärling, T., Ettema, D., Olsson, L. E., & Fujii, S. (2013). *How perceived quality of public transport services influences satisfaction and travel behavior*. Transport Policy, 25, 119–126.

**DIGITAL TRANSFORMATION IN THE BANKING SYSTEM: PROSPECTS FOR
COOPERATION BETWEEN FINTECH COMPANIES AND BANKS**

Gulboyeva Zulfiya Mamatkarim qizi

Master's Student in Banking,
Banking and Finance Academy of the Republic of Uzbekistan

Phone: +998 90 076 35 35

Email: cierfinan3535@gmail.com

Alternate Email: zulfiya_gulboyevna@icloud.com

Farhodjon Kubaevich Xolmamatov

PhD in Economics

Professor at the Department of Banking
Tashkent State University of Economics

E-mail: fkholmamatov@gmail.com

Annotation: This article examines the ongoing digital transformation within the banking system, with a particular focus on the growing collaboration between traditional banks and fintech companies. As financial technologies evolve rapidly, banks are increasingly partnering with fintech firms to enhance innovation, improve customer experience, and stay competitive in the digital era. The paper explores key areas of cooperation such as digital payments, lending platforms, open banking, and blockchain applications. It also highlights the challenges that may arise in such partnerships, including regulatory compliance, data sharing, and cybersecurity risks. By analyzing both global trends and regional developments, the study provides insights into how effective bank–fintech collaboration can shape the future of financial services.

Keywords: Digital transformation, banking system, fintech, financial technology, bank–fintech collaboration, open banking, innovation, digital payments, customer experience, financial services, regulatory compliance, cybersecurity.

INTRODUCTION

The global banking industry is undergoing a significant transformation driven by rapid advancements in digital technologies. Traditional financial institutions are increasingly embracing digital innovation to remain competitive, enhance customer experience, and streamline operations. One of the most notable trends in this digital shift is the growing collaboration between banks and fintech companies. Rather than viewing fintech firms as threats, many banks now see them as strategic partners capable of delivering innovative solutions in areas such as digital payments, lending, wealth management, and blockchain. This partnership model is reshaping the financial landscape by fostering agility, increasing financial inclusion, and accelerating the adoption of cutting-edge technologies. However, these collaborations also bring new challenges, including regulatory compliance, data privacy, and cybersecurity concerns. This paper explores the opportunities and challenges of bank–fintech partnerships and assesses their potential to drive sustainable digital transformation in the financial sector.

MAIN BODY.

1. The Rise of Digital Transformation in Banking. In the past decade, digital transformation has become a central theme in the evolution of the global banking sector. Driven by the need to meet changing customer expectations, improve efficiency, and respond to increasing competition, banks have begun adopting digital tools at an unprecedented pace. Digital transformation involves the integration of technologies such as artificial intelligence, mobile banking, blockchain, cloud computing, and data analytics into traditional banking operations. These innovations have changed how financial services are delivered, enabling real-time transactions, paperless processes, and personalized customer experiences.
2. The Emergence and Role of Fintech Companies. Fintech, short for financial technology, refers to companies that leverage digital innovation to offer financial services in faster, cheaper, and more accessible ways. Fintech startups have disrupted traditional financial models by introducing services such as peer-to-peer lending, digital wallets, robo-advisors, crowdfunding platforms, and decentralized finance (DeFi). These companies are typically more agile, customer-centric, and technology-driven than traditional banks. While they initially emerged as competitors to banks, the current trend shows a shift towards collaboration and partnership, especially as fintech firms often lack the regulatory experience, infrastructure, or customer base that established banks possess.
3. Areas of Bank–Fintech Collaboration.
 - a. Digital Payments and Wallets: Fintech companies have played a significant role in advancing digital payment systems. Banks now often partner with fintechs to provide seamless mobile payments, QR code transactions, and contactless solutions. These collaborations enable both parties to expand reach and enhance user experience.
 - b. Lending and Credit Scoring: Traditional banks typically rely on lengthy and paper-based credit evaluation processes. Fintechs, using AI and alternative data, offer faster and more accurate credit scoring systems. Banks are now integrating these models to improve efficiency in loan processing and widen access to credit, especially for underserved populations.
 - c. Open Banking and APIs: Open banking allows third-party fintechs to access bank data through Application Programming Interfaces (APIs), fostering transparency and innovation. Banks are increasingly opening their platforms to fintech developers to build customer-focused applications such as financial planning tools, account aggregators, and budgeting apps.
 - d. Blockchain and Smart Contracts: Blockchain technology offers secure, transparent, and efficient ways of recording transactions. Banks are collaborating with fintechs to explore the use of blockchain in cross-border payments, digital identity verification, and smart contracts for automating processes like loan disbursement and trade finance.
4. Benefits of Collaboration. Bank–fintech partnerships create a synergy where banks gain speed, innovation, and technological capability, while fintechs gain credibility, access to capital, and a broader customer base. Such cooperation results in enhanced customer experience, increased financial inclusion, cost savings, and faster deployment of digital services. Moreover, it allows banks to experiment with new technologies in a lower-risk environment by working with specialized fintech firms rather than building everything in-house.
5. Challenges and Risks. Despite the advantages, collaboration between banks and fintech companies also comes with challenges. One major concern is regulatory compliance. Banks operate in a heavily regulated environment, and integrating fintech services must comply with laws related to data

privacy, anti-money laundering (AML), and consumer protection. Another issue is cybersecurity. As more systems become interconnected, the risk of data breaches and cyberattacks increases. Ensuring secure data sharing and managing vulnerabilities across platforms is critical.

Cultural differences between traditional financial institutions and agile fintech startups may also lead to conflicts in goals, work pace, and risk tolerance. Therefore, both parties need clear communication, well-defined roles, and a mutual understanding of objectives.

6. Global and Regional Trends. Globally, numerous successful examples of bank–fintech collaboration exist. For instance, Goldman Sachs partnered with Apple to launch Apple Card, while BBVA collaborated with several fintech startups through its Open Talent initiative. In the Asian market, DBS Bank has established innovation labs to co-develop fintech solutions. In Uzbekistan and other developing economies, the government and central banks have begun promoting fintech ecosystems to modernize the banking sector. Regulatory sandboxes, digital identity initiatives, and investments in digital infrastructure are creating fertile ground for such collaborations.

CONCLUSION:

The ongoing digital transformation in the banking industry has opened new opportunities for innovation, efficiency, and customer engagement. Fintech companies, with their agile and technology-driven approach, have emerged as valuable partners rather than mere competitors to traditional banks. By collaborating in areas such as digital payments, lending, open banking, and blockchain, banks and fintech firms can jointly create a more inclusive, accessible, and efficient financial ecosystem. However, successful collaboration requires careful attention to regulatory compliance, data security, and strategic alignment. As the financial landscape continues to evolve, the ability of banks to embrace and integrate fintech solutions will be a key factor in their long-term sustainability and relevance. Therefore, fostering strong partnerships between banks and fintechs is not only a strategic move—it is a necessity for the future of digital finance.

REFERENCES:

1. Arner, D. W., Barberis, J. N., & Buckley, R. P. (2016). The Evolution of Fintech: A New Post-Crisis Paradigm? University of Hong Kong Faculty of Law Research Paper No. 2015/047.
2. Brynjolfsson, E., & McAfee, A. (2017). Machine, Platform, Crowd: Harnessing Our Digital Future. New York: W. W. Norton & Company.
3. Marr, B. (2016). Big Data in Practice: How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results. Wiley.
4. World Economic Forum. (2021). Transforming Paradigms: A Global AI in Financial Services Survey. Retrieved from
5. Basel Committee on Banking Supervision. (2020). Sound Practices: Implications of Fintech Developments for Banks and Bank Supervisors. Bank for International Settlements.
6. PwC (PricewaterhouseCoopers). (2022). Fintech and Banking: Unlocking Synergies in Digital Finance. Global Financial Services Report.
7. Central Bank of the Republic of Uzbekistan. (2023). Annual Report on Digital Banking Development and Fintech Integration in Uzbekistan. Tashkent.
8. Karimov, A.K. (2022). Digital Transformation in the Uzbek Banking Sector: Challenges and Opportunities. Tashkent: Economics Publishing.
9. Khodjaev, S. (2021). Financial Technologies and Digital Transformation in Central Asia. Journal of Economic Reforms, 3(2), 45–58.
10. Deloitte Insights. (2021). Fintech by the Numbers: Technology's Growing Impact on Financial Services. Retrieved from

**SCIENTIFIC-BASED METHODOLOGY FOR STRENGTHENING LOAD PARAMETERS
- VOLUME AND INTENSITY IN BAYDARKA AND CANOE ENGAGEMENTS.**

Khodjiyev Azizjon Rashidovich

Deputy Director for Academic Affairs of the Institute of Physical Education and Sports Research
Uzbekistan, Chirchik city

E-mail: xodjiyevazizjon@gmail.com

**ПАРАМЕТРЫ НАГРУЗКИ У ЗАНИМАЮЩИХСЯ БАЙДАРКОЙ И КАНОЭ -
МЕТОДИКА НАУЧНОГО УСИЛЕНИЯ ОБЪЕМА И ИНТЕНСИВНОСТИ**

Ходжиев Азизжон Рашидович

Заместитель директора по учебной работе Института научных исследований физической
культуры и спорта

Узбекистан, город Чирчик

E-mail: xodjiyevazizjon@gmail.com

**BAYDARKA VA KANOE BILAN SHUG'ULLANUVCHILARDA YUKLAMA
PARAMETRLARI – HAJM VA SHIDDATNI ILMIY ASOSDA KUCHAYTIRISH
METODIKASI**

Xodjiyev Azizjon Rashid o'g'li

Jismoniy tarbiya va sport ilmiy tadqiqotlar instituti o'quv ishlari bo'yicha direktor o'rinbosari
O'zbekiston, Chirchiq shahri.

E-mail: xodjiyevazizjon@gmail.com

Keywords: training load, physical training, special physical training, scientifically based methodology, functional capabilities.

Ключевые слова: тренировочная нагрузка, физическая подготовка, специальная физическая подготовка, научно обоснованная методика, функциональные возможности.

Kalit so'zlar: mashg'ulot yuklamasi, jismoniy tayyorgarlik, maxsus jismoniy tayyorgarlik, ilmiy asoslangan metodika, funktsional imkoniyatlar.

Relevance. One of the key factors determining the quality level of athletes' training nowadays is the proper planning of training loads, particularly the volume and intensity adjusted to the specific requirements of each sport. In canoe and kayak sports especially, achieving high performance is directly related to the athlete's functional capabilities, endurance level, and muscular strength. The development of these indicators primarily depends on the appropriate approach to managing the volume and intensity components of training loads. In canoeing and kayaking, training volume is defined by the duration and frequency of general and specific physical training sessions, while intensity is characterized by the execution speed, shortened rest intervals, and the degree of cardiovascular strain. For athletes in these disciplines, using a scientifically grounded, gradual load-increasing methodology plays a vital role in maintaining consistent athletic performance.

According to the theory of I.N. Maslova, the biological principles underlying the training process in canoe and kayak rowing play a crucial role in optimizing athletes' physical and functional capabilities.

In her research, the author extensively studied the physiological characteristics of athletes, including aerobic and anaerobic capacities, muscle composition, cardiovascular system adaptation, and energy exchange processes. The study places particular emphasis on the biological foundations of training, especially the body's adaptive mechanisms in the development of endurance, strength, and speed. Maslova's approach underscores the need to develop individualized training programs based on athletes' genetic potential, anthropometric characteristics, and biochemical indicators. Her work also addresses the importance of planning biological cycles to prevent overtraining, optimize recovery processes, and peak during competition periods. For instance, the author suggests monitoring lactate levels and managing muscle glycogen reserves as ways to enhance training effectiveness. Additionally, the study analyzes physiological differences between male and female athletes and their implications for the training process.

N.J. Bulgakova, in her work, highlights that the developmental trajectories of morpho-functional indicators serve as important criteria for identifying talent in competitive swimming. Her research analyzes changes over time in young athletes' body composition, muscle structure, cardiovascular functional state, and aerobic capacity. Special attention is given to the correlation of these indicators with success in swimming and the importance of early identification. Bulgakova's approach focuses on identifying potentially gifted athletes and designing individualized training programs by studying the growth dynamics of morpho-functional parameters. The study also examines the influence of genetic factors, environmental conditions, and training on these indicators. For example, the author notes that tall body structure, a high percentage of muscle mass, and efficient oxygen transport capacity are crucial for success in swimming. She also stresses the need to consider individual developmental differences in young athletes and organize the selection process accordingly. This work has made a significant contribution to developing scientifically grounded approaches for identifying and nurturing talent in swimming.

According to S.V. Verlin, constructing an annual training cycle is of great importance for highly qualified sprint kayakers. The author's extensive work discusses periodization of the training process, planning of training loads, and strategies for achieving peak performance during the competition phase. The study examines the main stages of the annual cycle—preparatory, competitive, and transitional periods. Verlin's approach considers the specific demands of sprint kayaking, particularly preparation for high-intensity short-distance races. The research presents specialized training programs aimed at developing endurance, speed, and technical skills, along with issues related to recovery and psychological preparedness. For instance, the author emphasizes the importance of interval training, anaerobic capacity development exercises, and simulating competition conditions. The study also highlights the necessity of tailoring training cycles to individual athlete characteristics and implementing monitoring systems.

Z.N. Azimov's research shows that innovative training methodologies for 10–11-year-old beginner kayakers are of vital importance during the initial stages of their development. His research comprehensively explores modern approaches aimed at developing young athletes' physical, technical, and psychological readiness. Particular attention is given to the physiological characteristics of younger age groups, such as muscle development level, coordination abilities, and aerobic capacity. Azimov's methodology emphasizes increasing engagement and forming technical skills through the use of game elements, specialized simulators, and balance exercises. The study

highlights the importance of integrating dryland training—such as balance boards and rhythmic drills—with early water-based practice. Additionally, the author stresses the need for an individualized approach to protect young athletes from overtraining and to ensure their psychological stability. The study offers recommendations on training programs tailored to each child's physical capabilities and systems for monitoring their progress.

According to A.A. Pomerantsev's observations, aerodynamic and hydrodynamic factors significantly influence competition results in sprint kayaking. His research provides a broad analysis of boat movement in water, the hydrodynamic characteristics of the paddle, and the aerodynamic effect of the athlete's body position. The study places emphasis on hydrodynamic elements such as water resistance of the boat, paddle-water interaction, and stroke phase efficiency. Simultaneously, aerodynamic factors—including the athlete's body posture, wind resistance, and the shape of the kayak—are also identified as critical performance determinants. Pomerantsev's approach is aimed at enhancing sprint performance by optimizing these elements. His study provides concrete recommendations for improving kayak design, refining paddle shape, and adjusting athlete body posture to maximize aerodynamic efficiency. The author also highlights the importance of using modern simulation technologies and hydrodynamic testing to analyze these factors. Furthermore, the research explores the interrelationship between aerodynamic and hydrodynamic elements and the athlete's physical conditioning and technical skills. This work demonstrates how incorporating technological and scientific approaches in sprint kayaking can significantly improve performance outcomes.

In our view, the following integrated strategies are recommended to synthesize insights from these studies. Combine Mambetnazarov's ergometer analyses with Pomerantsev's hydrodynamic optimization techniques to enhance technical and equipment efficiency. Integrate the physiological monitoring methods of Maslova and Dyachenko with Azimov's training methodology for young athletes to develop personalized and age-appropriate training programs.

Merge Bulgakova's talent identification strategies with Verlin's cyclical planning techniques to create a continuous development pathway from young athletes to elite rowers. Utilize modern technologies (e.g., motion capture systems and simulation software) to analyze all collected data in real time. This integrated approach forms the basis for a scientifically grounded, personalized, and technologically advanced training system in competitive rowing.

CONCLUSION.

One of the key factors leading canoe and kayak athletes to high-level sports performance is the gradual and scientifically grounded increase in training load volume and intensity. Proper planning of training loads plays a crucial role in effectively developing the athlete's functional capacities, endurance, and muscular strength. Therefore, the parameters of training loads must be clearly defined for each type of session and improved through an individualized approach.

LIST OF REFERENCES AND SOURCES.

1. Ширковец, Е.А. К вопросу о моделировании процесса управления состоянием спортсмена / Е.А. Ширковец, Б.Н. Шустин // Научные труды ВНИИФК 1997 г.; под ред. С.Д. Неверковича и др. – М., 1998. – С. 321-324.
2. Baker, J. A Three dimensional analysis of male and female elite sprint kayak paddlers / J. Baker, D. Roth, R. Sanders, B. Kelly // International symposium on biomechanics in sports. – 1999.

– P. 53-56.

3. Hay, J.G. Stroke length, stroke rate and boat speed in flatwater sprint kayaking and canoeing / J.G. Hay, M. Kaya // Report to U. S. Olympic Committee and U. S. canoe and kayak team.

– University of Iowa, IA. – 1998. – Pp. 153-162.

4. Kersting, U.G. Three-dimensional assessment of on water rowing technique: a methodological study / U.G. Kersting, N. Kurpiers, B.J.S. Darlow, V.W. Nolte. // 26 international conference on biomechanics in sports. – Seoul, Korea, 2008. – Pp. 72.

THE ROLE OF DIGITALIZATION IN THE NATIONAL SECURITY SYSTEM OF THE REPUBLIC OF UZBEKISTAN

Sitora Latipova

Lead specialist of the pr and communications
Department of the national agency for social protection
Under the president of the republic of uzbekistan

Sitoralatipova98@mail.ru

Abstract This article examines the multifaceted role of digitalization in strengthening the national security framework of the Republic of Uzbekistan. Through comprehensive analysis of policy documents, legislative frameworks, and empirical data, this study demonstrates how Uzbekistan's strategic digital transformation initiatives serve as both enablers of national development and critical components of security architecture. The research reveals that digitalization functions as a dual-edged instrument in national security: while enhancing state capacity, economic resilience, and administrative efficiency, it simultaneously introduces new vulnerabilities and threat vectors that require sophisticated mitigation strategies. The findings indicate that Uzbekistan's approach to digital security represents a comprehensive model that integrates technological advancement with security imperatives, positioning the country as a regional leader in cybersecurity governance while addressing emerging challenges in the digital age.

Key words: Digitalization, National Security, Uzbekistan, Cybersecurity, Digital Transformation, Digital Governance, Critical Infrastructure Protection, Information Security, Cyber Threats, Digital Policy, Digital Resilience, Central Asia, E-Government, Cybersecurity Governance, State Capacity

INTRODUCTION

The digital revolution has fundamentally transformed the landscape of national security, creating new paradigms for both opportunities and threats in the 21st century. For developing nations like Uzbekistan, digitalization represents not merely a technological upgrade but a strategic imperative for maintaining sovereignty, economic competitiveness, and social stability in an increasingly interconnected world.

Since gaining independence, Uzbekistan has embarked on an ambitious digital transformation journey, culminating in the comprehensive "Digital Uzbekistan-2030" strategy. This transformation has positioned digitalization at the heart of national development while simultaneously requiring sophisticated approaches to managing digital security risks. The intersection of digital development and national security has become particularly pronounced as cyber threats have evolved from peripheral concerns to central challenges affecting critical infrastructure, economic systems, and social cohesion.

This research examines how Uzbekistan has structured its digitalization efforts to serve national security objectives while managing the inherent risks of digital dependency. The study is particularly relevant given the country's unique position as a bridge between Europe and Asia, its rapid economic development, and its leadership role in Central Asian digital cooperation initiatives.

Methods

This research adopts a **mixed-methods approach**, integrating qualitative policy analysis with quantitative assessment of digital security indicators to explore the role of digitalization in enhancing national security in the Republic of Uzbekistan.

A critical discourse approach is used to assess how national security is conceptualized in these documents and how digitalization is framed within state policy priorities. In doing so, this study builds on **David Lyon's** framework of "surveillance societies" and **Manuel Castells'** theory of network society, which contextualize digital control and connectivity in modern governance structures.

This empirical data provides insights into how the country's cybersecurity infrastructure has developed in response to global and domestic challenges, and how it aligns with broader national security objectives.

The research focuses on the period **2017 to 2025**, which marks the most intensive stage of Uzbekistan's digital reform and security modernization efforts. Given Uzbekistan's strategic geographic position between Europe and Asia, the study also considers geopolitical factors and international cooperation in cybersecurity (e.g., partnerships with Russia, China, OSCE, and Central Asian republics).

Discussion

Uzbekistan's leadership in regional digital cooperation initiatives represents an important dimension of its national security strategy. The first meeting of Central Asian intelligence chiefs in 2024 established frameworks for regional cybersecurity cooperation, while broader digital connectivity initiatives with the European Union enhance technical cooperation.

These regional cooperation mechanisms serve multiple security functions: sharing threat intelligence, coordinating incident response, developing common standards, and building collective resilience against transnational cyber threats. However, regional cooperation also requires careful management of information sharing and sovereignty concerns.

Despite significant progress in digital development, Uzbekistan continues to face challenges related to the digital divide between urban and rural areas. Limited digital literacy among both citizens and public sector employees affects the effectiveness and security of digital systems.

Infrastructure vulnerabilities, particularly in rural areas, create potential attack vectors and limit the effectiveness of centralized security measures. Addressing these challenges requires sustained investment in education, infrastructure, and capacity building across all regions.

The shortage of qualified cybersecurity professionals represents a significant constraint on Uzbekistan's ability to manage digital security risks effectively. While initiatives such as cybersecurity training programs and international cooperation projects help address this gap, the rapid pace of digital transformation continues to outstrip capacity development.

The establishment of specialized educational institutions and certification programs represents important steps toward building indigenous cybersecurity capacity. However, competition for skilled professionals with private sector employers and international organizations creates ongoing challenges for government cybersecurity agencies.

Uzbekistan should continue developing its cybersecurity governance framework by enhancing coordination between civilian and security agencies, improving public-private partnership mechanisms, and strengthening international cooperation relationships. Regular review and updating

of cybersecurity legislation will be necessary to address evolving threat landscapes and technological developments.

Investment in cybersecurity workforce development should be prioritized, including expanded educational programs, professional certification systems, and competitive compensation packages to retain skilled professionals in government service. Regional cooperation initiatives should be expanded to include more comprehensive threat intelligence sharing and joint capability development.

Future policy development should focus on creating frameworks that enable continued innovation while managing security risks effectively. This includes developing risk-based approaches to emerging technology governance, establishing clear guidelines for international technology partnerships, and maintaining flexibility to adapt to rapidly evolving technological landscapes [\[54\]\[39\]](#). The development of regulatory sandboxes and pilot programs can help test new technologies and governance approaches while limiting systemic risks. International best practice adoption should be balanced with adaptation to local conditions and threat environments

Uzbekistan's leadership role in regional digital cooperation should be expanded through continued hosting of multilateral forums, development of common regional standards, and provision of technical assistance to neighboring countries. This leadership role enhances both regional stability and Uzbekistan's own security by building cooperative relationships and shared capacity.

Investment in research and development capabilities will be crucial for maintaining technological leadership and reducing dependence on foreign technology providers. The establishment of additional research centers and expansion of international research partnerships can help achieve these objectives while managing technology transfer risks.

CONCLUSION

The role of digitalization in Uzbekistan's national security system represents a sophisticated balancing act between embracing technological opportunities and managing associated risks. The country's comprehensive approach to digital transformation, anchored by robust strategic frameworks and supported by substantial institutional development, has created a model for digital security governance that other developing nations may find instructive.

The research demonstrates that digitalization serves national security objectives in multiple dimensions: enhancing state capacity through improved administrative efficiency, strengthening economic resilience through digital economy development, and building regional influence through leadership in digital cooperation initiatives. However, these benefits come with corresponding risks, including increased vulnerability to cyber attacks, dependence on complex technological systems, and potential foreign influence through technology partnerships.

Uzbekistan's success in managing these trade-offs reflects several key factors: strong political commitment to digital transformation, substantial investment in institutional capacity, comprehensive legal and regulatory frameworks, and proactive engagement with international partners and best practices. The country's achievements in e-government development, cybersecurity governance, and regional cooperation demonstrate the potential for developing nations to successfully navigate digital transformation challenges while enhancing national security.

Looking forward, Uzbekistan's continued success in digital security governance will depend on its ability to adapt to evolving threat landscapes, maintain technological competitiveness, and balance

innovation with security imperatives. The country's experience provides valuable insights for other nations pursuing similar digital transformation objectives while highlighting the importance of treating digitalization not merely as a technical challenge but as a fundamental component of modern national security strategy.

The implications of this research extend beyond Uzbekistan's borders, offering lessons for digital security governance in developing nations and contributing to broader understanding of how digitalization reshapes national security in the 21st century. As digital technologies continue to evolve and proliferate, the integration of digital development and security considerations will remain a critical challenge for nations worldwide.

REFERENCES

1. “Raqqamli O‘zbekiston – 2030” strategiyasi: Rasmiy hujjat / O‘zbekiston Respublikasi Prezidentining 2020-yil 5-oktabrdagi PF-6079-son Farmoni: <https://lex.uz/docs/-5030957>
2. “O‘zbekiston – 2030” strategiyasi: Rasmiy hujjat / O‘zbekiston Respublikasi Prezidentining 2023-yil 11-sentyabrdagi PF-158-son Farmoni: <https://lex.uz/ru/docs/-6600413>
3. Ganiyev S.K., Karimov M.M., Tashev K.A. Axborot xavfsizligi: Darslik / S.K. Ganiyev, M.M. Karimov, K.A. Tashev. — Toshkent: Fan va texnologiya, 2017. — 372 b.
4. Matchanov B.J. Axborot xavfsizligi asoslari: O‘quv qo‘llanma / B.J. Matchanov. — Urganch: Xorazm nashriyoti, 2024. — 164 b.
5. Tahirov B.N. Axborot xavfsizligi asoslari: O‘quv qo‘llanma / B.N. Tahirov. — Buxoro: Fan va ta’lim, 2022. — 156 b.
6. Karimov M.I., Turgunov N. Axborot xavfsizligi asoslari: O‘quv qo‘llanma / M.I. Karimov, N. Turgunov. — Toshkent: Yangi asr avlodi, 2016. — 245 b.
7. Гатчин Ю.А., Сухостат В.В., Куракин А.С., Донецкая Ю.В. Теория информационной безопасности и методология защиты информации – 2-е изд., испр. и доп. – СПб: Университет ИТМО, 2018. — 100 с.
8. Goel S. National Cyber Security Strategy and the Emergence of Strong Digital Borders // Connections QJ 19, no. 1 (2020): 73-86.
9. Afsah E. Artificial Intelligence, Law, and National Security // The Cambridge Handbook of Responsible Artificial Intelligence. — Cambridge University Press, 2022. — Chapter 26.

FORENSIC MEDICAL ASPECTS OF GUNSHOT INJURIES INFLICTED BY SPECIAL WEAPONS**S.A.Khakimov, B.M.Xotamov, D.M.Sirliboyev**

Tashkent state medical university, Republican scientific and practical center for forensic medicine

ANNOTATION

Forensic medical examination of gunshot wounds is the most complex problem of domestic and foreign forensic medicine. A large amount of knowledge and practical observations on injuries from standard samples of hand-held firearms has been accumulated. The emergence of new, unique samples of special-purpose weapons requires forensic medical professionals and criminologists to conduct a complex of morphological, spectral, forensic chemical, medical-criminalistic, radiological, and other special laboratory studies of injuries caused by such weapons. A case of performing a commission forensic medical examination with a decision on the differential diagnosis of fatal gunshot wounds caused by a specific sample of a special-purpose handheld firearm is presented.

Keywords: gunshot wound, forensic medical examination, special-purpose weapon, special reconnaissance knife, self-charging special pistol.

The importance and relevance of researching gunshot injuries to human body and clothing are confirmed by the events of recent years, when there has been a significant increase in armed conflicts and the number of crimes committed using various types of firearms worldwide.

The most widespread and diverse among OSOs are handheld firearms with a sound suppression device (SDS) - what are called silent weapons, or "silent and flameless firearms." It allows troops and special units of security forces to carry out counter-terrorism tasks and combat operations under special conditions. Conducting a full-fledged diagnostics of gunshot wounds from the main chamber of the body with a maximum permissible bullet velocity significantly complicates the use of special cartridges (SP) with reduced bullet velocity, as well as SPs in which expanding gunpowder gases are hermetically "locked" inside the cartridge case by a special rod that pushes out the bullet. All of this hinders obtaining the necessary expert information and creates prerequisites for incorrect interpretation of the obtained results and the commission of expert errors. The presence of various design-specific anti-aircraft gunpowder systems in cases of firing from a fixed position or close range significantly affects the properties of incoming firearms, which can serve as an objective prerequisite for differentiating them and similar methods. damages from various types of OSN. In our practice, there was a case of conducting a commission forensic medical examination on the fact of being liquidated. From the case materials, it is known that during the counter-terrorist operation, a. was blocked by a special forces unit in the basement of one of the private houses, he was unable to break free from the encirclement and unnoticedly leave the hiding place. As a result of the special operation, he received a fatal gunshot wound to the head. During the forensic examination of the corpse, traditional for such cases, expert tasks were set. One of the questions concerned the determination of the specific type of weapon that was destroyed. External examination of the corpse revealed: "...on the skin in the area of the right mastoid process (auricular region) 173 cm from the plantar surface of the feet, there is a wound of irregular oval shape with uneven and fine-fistulous edges, total size 0.8×0.7 cm, with a cone-shaped tissue defect in the center measuring

0.5×0.4 cm. Along the edges of the wound, more often in its upper part, there is a dark brown sedimentary band up to 0.3 cm wide and 3 radial tears of the epidermis up to 0.2-0.3 cm in length with local skin dislocation. In the soft tissues surrounding the wound, a dark red hemorrhage of irregular oval shape, measuring 4.5×3.5 cm, was detected, with the largest area located anterior and inferior to the wound itself (near the right auricle). In the central part of the wound fundus, a perforated defect of the skull bone (behind the right mastoid process) was palpated...."

According to specialized literature, copper was found on all contactograms in the wiping belts of cotton wool targets during shots from the PSS. The decrease in airflow velocity and temperature due to the cutting off of gunpowder gases inside the cartridge case led to the appearance of a homogeneous coloring from copper particles only at close distances (support - 15 cm). The diameter of the spot did not exceed 3 cm. At distances of 30-150 cm, only single (1-3) point inclusions of copper appeared. Appearance of an eraser in the belt for injuries caused from a distance to the support, is explained by the insignificant breakthrough of gunpowder gases from the SP 4 casing. The insignificant amount of molybdenum, its elevated melting point compared to copper, caused this metal to be detected in the rubbing belts at distances of 15 cm; in the form of a group of point inclusions at distances of 5-30 cm and 1-3 inclusions at distances of 50-150 cm.

Conclusion: The study showed that currently, domestic forensic medical specialists and criminologists have accumulated sufficient scientific and practical experience that allows for the determination of gunshot injuries to a person's body and clothing from various types of weapons. The large variety of hand-held firearm samples and, accordingly, the signs of their damaging effect create significant difficulties in performing practical examinations of firearms, especially from weapons similar in caliber, power, ammunition, and other parameters.

The forensic medical aspects of injuries inflicted from individual samples of firearms with TBI have not yet been sufficiently studied. Some of them have not been studied at all to this day. The current situation prevents such examinations from being conducted at a high methodological level. All this creates objective difficulties and prerequisites for expert errors or for the refusal of experts to solve such tasks due to their lack of necessary knowledge and approved methodological materials.

LITERATURE

1. Popov V.L., Shigeev V.B., Kuznetsov L.E. Forensic Medical Ballistics. SPb.: Hippocrates; 2002.
2. Popov V.L., Shigeev V.B., Kuznetsov L.E. Judicial-Medical Ballistics. SPb.: Hippocrates; 2002. (in Russian).
3. Kolkutin V.V., Makarov I.Yu. The formation, current state, and prospects for the development of forensic medical examination of gunshot wounds. Forensic medical examination. 2008;51 (1):11-15.
4. Kolkutin V.V., Makarov I.Yu. The development, state of art, and prospects of forensic examination of gunshot wounds. Forensic Medical Examination. 2008;51 (1):11-15. (in Russian).

5. Popov V.L., Kovalev A.V., Yagmurov O.D., Tolmachev I.A. Forensic Medicine. Textbook for medical universities and forensic medical experts. SPb.: LLC "Legal Center" Publishing House; 2016.
6. Popov V.L., Kovalev A.V., Yagmurov O.D., Tolmachev I.A. Forensic Medicine. Textbook for medical universities and forensic medical experts. SPb.: OOO Izd-vo "Yuridicheskiy sentr"; 2016. (in Russian).
7. Makarov I.Yu., Bogomolov D.V., Gulmamedova N.D., Shay A.N. Modern methods of diagnosing gunshot wounds. Forensic medical examination. 2019;62 (2):55-60.
8. Makarov I.Yu., Bogomolov D.V., Gyulzmamedova N.D., Shai A.N. Certain modern methods for the diagnosis of gunshot injuries. Forensic medical examination. 2019;62 (2):55-60. (In Russian). <https://doi.org/10.17116/sudmed20196202155>
9. Isakov V.D., Panchuk Yu.P., Makarov I.Yu. Spectral Research Methods in Studying Damage from Combined Weapons. Almanac of Forensic Medicine. 2004;7:65-68.
10. Isakov V.D., Panchuk Yu.P., Makarov I.Yu. Spectral research methods in the study of combined arms damage. Almanac of Forensic Medicine. 2004;7:65-68. (in Russian).
11. Tolmachev I.A., Panchuk Yu.P., Makarov I.Yu. Possibilities of spectral methods for investigating injuries caused by special purpose weapons. Forensic medical examination. 2006;49 (4):28-29.
12. Tolmachev I.A., Panchuk Yu.P., Makarov I.Yu. Possibilities of spectral investments in injuries inflicted from special arms. Sudebno-meditinskaja eksper- tiza. 2006;49 (4):28-29. (in Russian).
13. Kolkutin V.V., Tolmachev I.A., Makarov I.Yu. Trends in forensic-ballistic research of firearms with a device for shooting sound pressure and traces of its application. Current issues of forensic medicine and expert practice at the present stage. Collection. M. 2006; 123-124.
14. Kolkutin V.V., Tolmachev I.A., Makarov I.Yu. Trends in forensic-ballistic research of firearms with sound suppression devices have erased the traces of their use. Current issues of forensic medicine and expert practice at the present stage. Collection. M. 2006;123-124. (in Russian).
15. Murahovsky V.I. Slutskiy E.A. Special Weapons. Handbook. M.: Elakos; 1995.

THE IMPORTANCE OF ENHANCING STUDENT ENGAGEMENT THROUGH PERSON-CENTERED EDUCATION IN TEACHING BIOETHICS

M.R.Salimova

Tashkent State Medical University

ABSTRACT

The fact that the majority of graduates from these educational institutions are admitted to higher education institutions through entrance exams in their chosen specialties serves as evidence for our statement. In addition to working with gifted students, there are also subjects that provide in-depth knowledge, such as bioethics, as well as special classes and forms like tutoring (individual supplementary education). These allow students to gain broader and deeper knowledge, skills, and competencies in the subjects they are interested in.

Keywords: Students' bioethics.

Pedagogical scientists have developed substantiated pedagogical technologies for a person-centered approach in the educational process, which include: person-centered education; collaborative pedagogy; adaptive communication pedagogical technology; game technology; developmental teaching technology; problem-based learning technology; differentiated learning; and individualized learning technology.

In each of these areas, education is organized taking into account the interests, abilities, opportunities, and conditions of the student's personality. Particularly, in person-centered education, special emphasis is placed on developing the student's ability to strive for solutions to problematic situations through independent thinking.

It is important to instill in students the understanding that they should first attempt to study independently and try to solve problems in difficult learning situations without the teacher's help, and only then turn to the teacher for assistance to verify the correctness of their conclusions.

When it comes to lessons that are not mandatory depending on the interests of students, there is no room for objection that the problem-based teaching method is appropriate. In ordinary lessons, the teacher's task is often ineffective and compelling. It is important to remember that students' boredom in lessons stems not from their laziness, but from the teacher's inability to interest them in the topic being taught. Many lessons are usually conducted according to the "survey-explanation - consolidation of acquired knowledge - homework" scheme. As a result, some students' minds and hands become free.

Deviating from the lesson's objective, engaging in unnecessary conversations with students, wasting time, and failing to read supplementary literature beyond the textbook are factors that negatively impact the lesson's content. Additionally, posing overly difficult or convoluted questions can make students uncomfortable, ultimately leading to their disengagement from both the subject and the teacher.

It is particularly important to emphasize that the intensive personal development through education and upbringing, as well as the assimilation of material and spiritual values, occurs solely as a result of an individual's personal activity.

The following recommendations are considered crucial in student-centered education:

1. Determining measures for improving educational institutions' activities and effectively utilizing social, material-technical, pedagogical, and psychological resources that contribute to enhancing their efficiency.
2. Studying the accumulated experience in identifying and developing children's potential in educational institutions of developed foreign countries, as well as the republic, and applying it to the continuous education system, taking into account national and regional characteristics.
3. Developing the content and practical foundations of management and pedagogical processes that ensure the effectiveness of educational institutions specializing in teaching gifted children, based on advanced approaches.
4. Establishing cooperation between educational institutions and families to effectively educate gifted children.
5. Intensifying the development of methodological recommendations and manuals that serve to increase the effectiveness of educational institutions specializing in teaching gifted students.

In implementing these processes, alongside improving educational content and developing manuals and recommendations, introducing innovative approaches aimed at activating the educational process is of particular importance. While the initial stage of educational reforms in our republic focused on creating scientific and theoretical foundations of pedagogical technologies based on local characteristics, today these are finding practical application in the lessons of every educational institution and teacher. During our research, we identified and observed elements of pedagogical technology such as problem-based learning, integrated learning, modular learning, developmental learning, differentiated learning, active learning, and game-based learning. Among these advanced pedagogical technology approaches, active teaching methods aroused our greatest interest.

To address the issue under consideration in secondary specialized and higher education, it is advisable to use active forms and methods such as research, debates, and mutual knowledge exchange, along with increasing the educational effectiveness of information. These approaches teach students to independently discover new knowledge and concepts, defend their views and ideas, and share their worldviews and insights with their peers. This process requires fostering creative thinking, developing imagination, embracing diverse thoughts and perspectives, honing observation skills, strengthening memory, and cultivating resourcefulness, perceptiveness, ingenuity, and intelligence. The main direction in developing independent and creative thinking in students involves fostering their ability to think independently and creatively, understand the rules and criteria for discussing specific issues, express their opinions correctly, consistently, and with proper reasoning, reflect on their thoughts, and draw conclusions from their expressed ideas.

The content of the second approach to addressing this issue is as follows:

As is known, the lesson is the primary form of organizing the educational process in educational institutions. However, most teachers perceive the main and sole purpose of the lesson they lead as "imparting knowledge to students" on the topic outlined in the work plan. In this process, the principle of unity between education and upbringing is not always observed, and in many cases, conditions for students' independent and creative thinking are not created during the lesson. For this reason, researching methods to implement topic-related knowledge in combination with activating students' independent and creative thinking during lessons is particularly relevant.

Extracurricular activities and those outside educational institutions are primarily carried out in individual, group, and mass forms. It should be emphasized that extracurricular activities not only shape the ideological foundations of students' worldviews but also ensure their transformation into practical action. In this process, a student does not remain a passive listener and observer; they begin to acquire knowledge independently and freely, strive to understand scientific and socio-political information, and become an active promoter of the qualities they have acquired among their peers.

Activities in circles and various associations aimed at students' independent and creative research, which differ in content and form, not only foster aesthetic social thinking but also lead to mutual coherence. Posing problematic issues and solving them independently and creatively helps young people acquire additional knowledge, develop their worldview, and form skills and abilities to defend their opinions with evidence.

In both directions of developing independent creative thinking among young people, the following tasks need to be addressed:

- Develop methodological foundations for enhancing independent and creative thinking skills of young people to meet globally established principles, taking into account the components of the national model of personnel training in our republic, as well as the historical formation and ethnopedagogical features of the education system;
- Develop recommendations aimed at increasing the effectiveness of general secondary education, secondary specialized education, and higher education by studying the potential for activating independent and creative thinking among young people in the subjects provided for in the curricula;
- Develop criteria for selecting the content of activities to stimulate independent and creative thinking of young people across all levels of continuous education - preschool, general secondary, secondary specialized, and higher education;
- Develop innovative technologies aimed at creating a mechanism for the rapid implementation of the most advanced practices in fostering independent and creative thinking among young people within the education system.

The recommendations presented in this regard will serve as a foundation for creating theoretical and methodological bases to increase the level of student preparation that meets the requirements of the state educational standard. This will enable students to achieve a high degree of academic mobility as highly developed individuals with active independent and creative qualities. Furthermore, to effectively address the tasks in this area, it is necessary to synthesize concepts of an independently thinking creative personality and develop information support technology for managing the process of developing its unified structure.

Conclusion: In the process of teaching specialized subjects within the education system, one of the methods for developing students' clinical thinking is the widespread application of the problem-based learning approach.

The ongoing reforms in the field of medical education in our republic constitute a process of nurturing and training bold, independent-thinking, knowledgeable, and skilled specialists who can ensure the development of Uzbekistan, contribute to its rise to the level of the world's advanced countries, as well as possess positive qualities.

LITERATURE

1. Bespalova L. What is a cluster? [Electronic resource] // URL: <http://siok.rightside.ru/siok/> 2009-12-01-06-24-41. Title from screen.
2. Osechkina L.I. Cluster Approach as a Condition for Increasing the Effectiveness of Higher Education Institutions // Higher Education in Russia. 2012. No. 8-9. P. 75.
3. Sidorin A.V. The system of developing human resources potential in high-tech industries based on the cluster approach // Internet journal "Naukovedenie." 2012. No. 4. P. 3.
4. Porter M. Competition. Kiev: "Williams," 2001. 208 p.
5. Davydova N.N., Igoshev B.M. et al. Educational cluster as a system-forming component of the regional model of continuous pedagogical education // Pedagogical Education in Russia. 2014. No. 10. P. 75.
6. Zakhidov G.E. Method of organizing and managing production using the cluster approach. T.: Fan, 2016. 160 p.
7. Khodjamkulov, U., Botirova, Sh., Shofkorov, A., & Abdirimova, I. (2020). Bases of Organizing Cooperation between Educational Institutions through Clusters (on the Example of the Education System of Uzbekistan). Journal of Critical Reviews, 7 (12), 243-247.
8. Mardonov, Sh., Khodjamkulov, U., Botirova, Sh., & Shermatova, U. (2020). The Need to Educate Young People with the Spirit of Patriotism in the Context of Globalization. Journal of Critical Reviews, 7 (12), 166-169. <http://dx.doi.org/10.31838/jcr.07.12.29>.

PEDAGOGUE AND VALUE SYSTEM

Rakhmonova Nigina Aminjonovna

Independent researcher at Nizami Tashkent State Pedagogical University

In the current conditions of independence, values are being assimilated on the basis of universal principles. Such assimilation of values, their social and spiritual development, change in the thinking of society members, and their place in the upbringing of children are considered a priority area of state importance. Therefore, it has become necessary to pay attention to values and use them in education.

National and universal values are a philosophical teaching about the material, cultural, spiritual, moral and psychological values of an individual, group, and society, which are a system of valuable norms in their relationship with the material world and in the process of historical development. That is, values are a set of people, relationships, situations, material things and spiritual values that have prestige, respect, influence and importance among society and people. The concept of values is used to show the human, social and cultural significance of relevant phenomena in reality. Values are formed and developed in the process of human activity. It has a social character, it is a set of things and phenomena that benefit man and serve his needs. Natural and social phenomena that do not suit man and his interests cannot be valued. For example, everything in nature becomes valuable only when it serves human needs.

As conditions in social life change and the demands of society and the individual develop, pedagogical values also change. This is also reflected in changes and reforms in education. For example, while in a certain era there was a shift from the passive transmission of knowledge to the explanation and then the development of problems, in the current period of reforms, as a result of democratic changes, non-traditional forms and methods of education are developing and advanced technologies are being introduced.

The subjective perception of pedagogical values and their integration into the educational process are determined by the skill of the teacher and the level of his professional activity.

In pedagogy, national and universal values are the basis of the idea of humanizing the educational process and have great philosophical, anthropological and socio-political significance. Its solution is the strategy of a social movement that can contribute to the development of man and civilization, that is, to its progress. This is the educational system that will give man the necessary strength and power in the future, and restore his socially significant worldview and moral interests. However, to date, the description of social pedagogical values has not been carried out. However, there are attempts to identify professional pedagogical values, for example, the content of pedagogical activity and the possibilities of personal self-development taken into account in pedagogical activity, the social significance of pedagogical work and its humanitarian nature, and others. However, pedagogical values differ from each other in their degree of existence. It is these differences that allow us to classify values.

National and universal values "I" as a system of value orientations consists not only of cognitive, but also of emotional-volitional components that have a functional orientation. It is instilled with

pedagogical values, which are the basis of the individual system, as well as socio-pedagogical and professional-group values.

This system is represented by V.A. Slastenin as follows:

values associated with the decision-making of a person in the social and professional environment (social significance of the pedagogical work, prestige of pedagogical activity, recognition of the teaching profession by others);

values that satisfy communication needs and expand its scope (communication with children, colleagues, exchange of national and universal values);

values that are aimed at developing creative individuality in oneself (the opportunity to develop professional and creative abilities, familiarization with world culture, engagement in a favorite occupation, self-improvement);

values that allow for self-discovery (the creative, variable nature of pedagogical skills, the romantic and interesting nature of the teaching profession, the opportunity to support socially disadvantaged children);

values that allow for the satisfaction of pragmatic needs (the opportunity to receive guaranteed public service, salary and vacation time).

Among the established pedagogical values, the following values, which differ in content, can be distinguished: values that serve a sufficient degree of self-service, that is, values that are aimed at a goal, are the creative nature of the pedagogical work, its authority, social significance, responsibility before the state, the ability to make decisions, love for children and indicates dependence;

purposeful values perform a priority task in the system of other pedagogical values. These values interrelate in the teacher's mind to the concepts of "child personality" and "I am a professional".

Objective values reflect the state educational policy and the level of development of pedagogy and are widely used as a factor of pedagogical activity and influence other values. They form the basis of vocational education and are developed as a result of the development of psychological theory and its methodology, as well as advanced psychological technologies.

LIST OF USED LITERATURE

1. Слостенин В.А., Исаев И.Ф., Шиянов Е.Н. // Педагогика: учеб. пособие для студ. высш. учеб. заведений. – 5-е изд., стер. – М.: Издательский центр «Академия», 2006.
2. Temirova N.E. «Talaba yoshlarning ma'naviy shakllanishida milliy va umuminsoniy qadriyatlar dialektikasi» UDK: 17.022.1-057.87 (575.1)374.32 (575.1). Toshkent-2017. B.150
3. Yunusova E. Yoshlarning ma'naviy kamoloti.-T.:O'zbekiston, 1995. -B.82.

RESPUBLIKAMIZDA INNOVATSION TADBIRKORLIKNI RIVOJLANTIRISH ORQALI BANDLIKNI OSHIRISH

Norboyeva Dilnoza Darvishaliyevna

Jizzax politexnika instituti "Iqtisodiyot va menejment" kafedrası o'qituvchisi

Saparboyeva Madina

Jizzax politexnika instituti 531-22 guruh, 4-kurs talabasi

Annotatsiya: Maqolada innovatsion tadbirkorlik sohasini rivojlantirish orqali aholining ish bilan bandligini oshirish yo'nalishlari tadqiq etilgan. Innovatsion faoliyatni shaxsiy tadbirkor sifatida amalga oshirishning afzalliklari va kamchiliklari yoritib berilgan, shu asosida muallifning taklif va tavsiyalari ilgari surilgan.

Kalit so'zlar: tadbirkorlik, ish bilan bandlik, mehnat munosabatlari, aholi daromadi va farovonligi, innovatsion salohiyat.

Innovatsion iqtisodiyot sharoitida kichik biznes va xususiy tadbirkorlikning jadal va samarali rivojlanishi evaziga mikroiqtisodiyotda ro'y berayotgan o'zgarishlarga asoslanib,

individual inson kapitalining birlamchi asosini ishchi kuchi emas, balki inson unumli qobiliyatlari tashkil etadi.

O'zbekiston Respublikasi Prezidenti "Bugun biz davlat va jamiyat xayotining barcha sohalarini tubdan yangilashga qaratilgan innovatsion rivojlanish yo'liga o'tmoqdamiz. Bu bejiz emas, albatta. Chunki zamon shiddat bilan rivojlanib borayotgan hozirgi davrda kim yutadi ?

Yangi fikr, yangi g'oyaga, innovatsiyaga tayangan davlat yutadi. Innovatsiya - bu, kelajak

degani. Biz buyuk kelajagimizni barpo etishni bugundan boshlaydigan bo'lsak, uni aynan

innovatsion g'oyalar, innovatsion yondashuv asosida boshlashimiz kerak". Binobarin, bozor iqtisodiyotini rivojlantirishning, aniqrog'i tadbirkorlik faoliyatining asosiy lokomotivi - bu,

innovatsion tadbirkorlikdir.

Dunyoning bir qator rivojlangan mamlakatlarida kichik biznes va xususiy tadbirkorlikni

rivojlantirishda mehnat munosabatlari tajribasini o'rganish natijasida mamlakatimizda ham

quyidagi chora-tadbirlarni amalga oshirish maqsadga muvofiq bo'ladi:

- korxona va tashkilotlarda kasbiy o'sish, martaba, kasbiy tayyorgarlik, raqobat borasida

munosabatlarning qo'llab-quvvatlanishi;

- innovatsion tadbirkorlikni iqtisodiyotning turli sohalarida tashkil etilishi mehnatga layoqatli aholi orasida bandlik darajasining oshishi;

- korxona va tashkilotlarda bo'sh ish o'rinlari banki va yuqori malakali kadrlarga bo'lgan

ehtiyojlarni rag'batlantiruvchi axborotlar bazasining shakllanishi.

Milliy iqtisodiyotning rivojlanishi sharoitida innovatsion salohiyatni faol turdagi takror ishlab chiqarish manbaiga aylantirish uchun ish bilan bandlik va mehnatga layoqatli aholining

ijtimoiy ishlab chiqarishdagi ishtirokini ta'minlash muhim hisoblanadi.

O'zbekiston Respublikasida 2022 yilda yakka tartibdagi tadbirkorlar soni 238,5 mingni tashkil qilib, bu ko'rsatkich o'tgan yilga nisbatan 9,4 % ga oshib borganligini ko'rish mumkin.

Jami tadbirkorlarning 41,6 % ayollar hisobiga to'g'ri keladi. Sohalar bo'yicha o'sish ko'rsatkichi

hunarmandchilik (19,3 %), chakana savdo (9,2 %), maishiy xizmat ko'rsatish (8,3 %), boshqa

faoliyat turlarida (7 %) ni tashkil qilgan.[2]. Shuningdek, O'zbekistonda aholi ish bilan bandligini

ta'minlash va daromadini oshirish uchun kichik biznes va xususiy tadbirkorlik sohalarida

innovatsion, noan'anaviy ish joylarini ko'paytirish mehnat bozorini barqarorlashtirish imkoniyatlarini yanada keygaytiradi.

Shuningdek, innovatsion tadbirkorlik faoliyatining o'ziga xos xususiyatlari va unda bandlikka e'tibor qaratishni lozim deb hisoblaymiz, zero aholi turmush tarzining yaxshilanishi

va daromadlarining oshishiga olib keladi. Akademik Q.X. Abdurahmonov fikricha innovatsion

tadbirkorlik mehnat munosabatlarining zamonaviy shakli bo'lib, ham aksiyadorlik jamiyati

miqyosida, ham kichik korxonada shaxsiy tadbirkor sifatida amalga oshirilishi mumkin.

Jumladan, innovatsion tadbirkorlik faoliyatini kichik tuzilma - kichik innovatsion korxonasi

sifatida amalga oshirishning o'z afzalliklari va kamchiliklari mavjud, innovatsion faoliyatni

shaxsiy tadbirkor sifatida amalga oshirishning afzalliklari va kamchiliklari guruhlanadi.

Innovatsion faoliyatni shaxsiy tadbirkor sifatida amalga oshirishning afzalliklari va

Kamchiliklari

Innovatsion faoliyatni shaxsiy

tadbirkor sifatida amalga oshirishning afzalliklari

- Biznesni tashkil etishda davlat tomonidan ro'yxatga olishning yengilligi
- Bankda hisob varaqni ochish tezkorligi
- Soliqqa tortishning soddalashtirilgan tartibi va soliq stavkalarining pastligi
- Tashqi moliyalashtirish manbalarini topishning murakkabligi
- Hisobotlarning soddaligi
- Biznesni yuritishda mustaqillik va yuksak
- samaradorlikka erishish uchun motivatsiyaning kuchliligi

Innovatsion faoliyatni shaxsiy tadbirkor sifatida

amalga oshirishning kamchiliklari

- Moliya-xo'jalik, innovatsion va boshqaruv funksiyalarining qo'shib olib borilishi
- Shaxsiy tadbirkorlikni amalga oshirishda kredit olish uchun garov masalasi murakkabligi
- Tashqi moliyalashtirish manbalarini topishning murakkabligi
- Ishlab chiqarilgan innovatsion mahsulot uchun mijoz topishning qiyinligi
- Majburiyatlar bo'yicha to'liq shaxsiy ma'suliyat
- KBXTda ish bilan bandlikning zamonaviy shakllarini tadbiq etish imkoniyatlaridan to'liq foydalanmaslik

Iqtisodiy, ijtimoiy, migratsion, demografik, munosabatlar ayollarning ish bilan bandligi

samaradorligini oshirishda gender tengligi darajasida o'rganilishi lozimki, bu jarayon ularning

nafaqat ijtimoiy ishlab chiqarishda ish bilan bandligi balki, ularning oilaviy yumushlar va

farzandlar tarbiyasi bilan mashg'ulligini uyg'un tarzda olib borishlariga sharoitlar yaratish kerak.

Makroiqtisodiy o'zgarishlarning asosiy belgilaridan biri yangi ish joylarini tashkil etish bo'lib ishsizlik darajasini kamaytirish, birinchi navbatda, ish kuchi taklifidan kelib chiqqan

holda yangi ish joylari yaratishga bog'liqdir. Mamlakatda yangi ish o'rinlari yaratishning o'ziga

xos tizimi yaratilgan bo'lib yangi ish o'rinlari investitsiya dasturlari, mahalliyashtirish, ishlab

chiqarishni modernizatsiyalash va texnologik qayta jihozlash tarmoq dasturlari, kasanachilikni

rivojlantirish hisobiga yaratilmoqda.

Ayollar va erkaklarning kichik biznes va xususiy tadbirkorlikda ish bilan bandligi o'ziga

xos xususiyatlar bilan farqlanadi, jumladan, erkaklar mazkur faoliyatni sanoat, qurilish, savdo,

xizmat ko'rsatishda maqbul bo'lgan tarmoq deb hisoblasalar, ayollar xizmat ko'rsatish, savdo,

yengil sanoat, qishloq xo'jaligi mahsulotlarini qayta ishlash tarmoqlarini afzal ko'radilar. Qishloq

joylarida esa ayollar mazkur sohalarida ko'proq kasanachilikni ma'qul deb hisoblaydilar va bu

borada ularni yaqin do'stlari, turmush o'rtog'i, oila, ayollar uyushmalari qo'llab-quvvatlaydilar.

Ayollarga mos ish o'rinlarini ishlab chiqarishning kichik biznes va xususiy tadbirkorlik sohalarida yaratish yuqori unumdorlikni ta'minlaydi.

Bundan kelib chiqqan holda e'tirof etish kerakki, ayollarning ayniqsa, mehnat bozoriga birinchi bor kirib kelayotgan qizlarning mutaxassisligi bo'yicha ishga joylashtirishda real va

moliyaviy sektorlar bo'yicha ish bilan bandligini ta'minlashning aniq tartiblarni belgilash orqali

ularning o'z ish o'rinlaridagi qo'nimlilikini ta'minlash hamda bu borada ish beruvchilar, nodavlat

notijorat tashkilotlari ma'sulligini oshirish, mehnatni tashkil qilish va boshqarishning aynan

ayollar manfaatiga qaratilgan mexanizmlarni takomillashtirish maqsadga muvofiq.

Respublikada oilaviy tadbirkorlik ayollarning ish bilan bandligini iqtisodiy tartibga solishda muhim imkoniyatlardan biri hisoblanadi. Ayollar tadbirkorligi, ayniqsa oilaviy tadbirkorligini rivojlantirish uchun quyidagi samarali mexanizmlarni tatbiq etish lozim:

innovatsion tadbirkorlikni iqtisodiy qo'llab-quvvatlash to'g'risida me'yoriy-qonuniy hujjatlarni

ishlab chiqish va ularni amaliyotga tatbiq etish, tijorat banklari, sug'urta, lizing va boshqa

moliyaviy tashkilotlar tomonidan imtiyozli kreditlar ajratish hamda xizmatlar ko'rsatishni yanada takomillashtirish, qayta ishlash sanoati, xizmat ko'rsatish sohalarida ayollar uchun tadbirkorlik

ish joylarini yaratish, qishloq xo'jaligi ishlab

chiqarishida ularning oilaviy tadbirkorligi uchun iqtisodiy imtiyozlar taqdim etish.

FOYDALANGAN ADABIYOTLAR RO'YXATI:

1. Mirziyoev SH.M. O'zbekiston Respublikasi Prezidenti Shavkat Mirziyoevning 2017 yil 29
2. dekabrda Oliy majlisga murojaatnomasi. -T: "O'zbekiston", 2018.- 80 b.
3. O'zbekiston Respublikasi Prezidenti huzuridagi Statistika Agentligi ma'lumotlari. <https://www>
4. Stat.uz.
5. Norboyeva, D. D. (2023). ZAMONAVIY SANOAT KORXONALARINING IQTISODIY SALOHİYATINI BOSHQARISH. Educational Research in Universal Sciences, 2(8), 167-171.
6. Норбоева, Д. Д. (2023). ЖИЗЗАХ ВИЛОЯТИДА УРБАНИЗАЦИЯ ВА ДЕМОГРАФИК ЖАРАЁНЛАРИНИНГ МЕҲНАТ БОЗОРИГА ТАЪСИРИ. Educational Research in Universal Sciences, 2(8), 156-162.
7. Norbayeva, D. D. (2023). MENEJMENTDA BOSHQARUV USLUBINI JORIY ETISHDA RAQAMLI IQTISODIYOTDAN FOYDALANISH AHAMIYATI. Educational Research in Universal Sciences, 2(8), 163-166.
8. Darvishaliyevna, N. D. (2023). INNOVATSION RIVOJLANISH SHAROITIDA SANOAT KORXONALARINING IQTISODIY SALOHİYATINI BOSHQARISH. BOSHQARUV VA ETIKA QOIDALARI ONLAYN ILMIY JURNALI, 3(1), 62-66.

9. Darvishaliyevna, N. D. (2023). BOSHQARUV USLUBLARINI TATBIQ ETISHDA RAQAMLI IQTISODIYOTDAN FOYDALANISH ZARURATI. BOSHQARUV VA ETIKA QOIDALARI ONLAYN ILMIY JURNALI, 3(5), 21-25.
10. Darvishaliyevna, N. D. (2023). MAMLAKATIMIZDA KICHIK BIZNES VA TADBIRKORLIKNI RIVOJLANTIRISH HAMDA YANGI ISH JOYLARINI YARATISHNING MUHIM OMILI SIFATIDA. BOSHQARUV VA ETIKA QOIDALARI ONLAYN ILMIY JURNALI, 3(5), 68-72.
11. Darvishaliyevna, N. D. (2019). Indo–Asian Journal of Multidisciplinary Research (IAJMR).
12. Darvishaliyevna, N. D. (2021). PRODUCT QUALITY MANAGEMENT IN THE ENTERPRISE. Galaxy International Interdisciplinary Research Journal, 9(12), 168-170.
13. Норбоева, Д. Д. (2019). КОНКУРЕНТОСПОСОБНОСТЬ ПРЕДПРИЯТИЯ. Экономика и социум, (9 (64)), 208-210.
14. Норбоева, Д. Д. (2019). МЕТОДЫ УПРАВЛЕНИЯ ПРЕДПРИЯТИЕМ В ЭКОНОМИЧЕСКОЙ СФЕРЕ. Экономика и социум, (9 (64)), 204-207.
15. Darvishaliyevna, N. D. (2024). Corporate Position, Risk and Brand in Achieving Financial-Economic Stability. Best Journal of Innovation in Science, Research and Development, 3(4), 613-619.

AVESTO “YASHT”LARDA MITRANING AKS ETISHI

Rahmonberdiyeva Mahkamoy Jo'ra qizi.

Termiz davlat universiteti tayanch doktoranti

Annotatsiya: Ushbu maqola Mitraning “Yasht”larda keltirilishiga bag’ishlangan bo’lib, Mitraga atab bitilgan alqovlar va unda mazkur xudoning sifatleri keltirilishi izohlanadi. Mitraning ahdga sodiqlik, mo’l hosil bera olish sifati, keng yaylovlarni nazorat qilishi, yolg’on tarafdorlarini jazolashi va eng muhim jihat u Quyoshni ifodalashi, shu bilan bir qatorda Xurshed Yashtdagi quyosh alqovi bilan o’xshash va farqli xususiyatlar keltiriladi.

Kalit so’zlar: Mehr Yasht, zardushtiylik, Quyosh, haqiqat, shartnoma, Rigveda, Varuna, Xurshed Yasht, Xvare-shaeta, Baqtriya, Avesto, Ahriman.

Abstract: This article is devoted to the representation of Mithra in the “Yashts,” focusing on the hymns dedicated to Mithra and the description of his qualities. Mithra is portrayed as the guardian of oaths, the giver of abundance, the overseer of vast pastures, the punisher of those who follow falsehood, and most importantly, as the embodiment of the Sun. At the same time, the similarities and differences between the solar hymn in the Khvarshēd Yasht and the Mihr Yasht are analyzed.

Keywords: Mihr Yasht, Zoroastrianism, Sun, truth, covenant, Rigveda, Varuna, Khvarshēd Yasht, Khvare-shaeta, Bactria, Avesta, Ahriman.

Qadimgi Sharq mifologiyasi va diniy qarashlarida Mitra xudosining tutgan o’rni alohida e’tiborga loyiq. Mazkur maqolada Mitraning aynan Avesto matnlaridagi – xususan Mehr Yashtdagi obraziga e’tibor qaratiladi. Mitra — haqiqat, yorug’lik va ahdga sadoqat timsoli sifatida Avestoda keng ifodalangan. Zardushtiylik diniy tizimida u ahloqiy nazorat va ijtimoiy tartibni ta’minlovchi kuch sifatida namoyon bo’ladi. Maqolada ushbu obrazning semantik qatlamlari, diniy-falsafiy mazmuni va mifologik aspektlari tahlil qilinadi. Shuningdek, Mitra obrazining qadimgi Turon xalqlarining e’tiqodiy dunyoqarashiga ta’siri haqida ham fikr yuritiladi.

Mitra Avestoda “Mehr” nomi bilan tanilgan bo’lib, u haqiqat, muqaddas ahdnoma, quyosh va yorug’lik bilan bog’liq ilohiy kuchni ifodalaydi. Mehr Yashtda Mitra “ming ko’zli”, “ming quloqli”, “hammadan ogoh” sifatida ta’riflanadi. Bu — uning insoniyat ustidan doimiy nazorat qiluvchi, gunohkorlarni jazosiz qoldirmaydigan xudo sifatidagi obrazini kuchaytiradi. U Yaratganning amrlarini hayotga tatbiq etuvchi ilohdir.

Mehr Yashtda Mitraning quyidagi tasvirlari e’tiborga loyiq: Ming ko’zli va ming quloqli deya tasvirlangan timsoli mavjud bo’lib, bu timsollar uning butun olamni ko’ruvchi va eshituvchi, haqiqatni aniqlovchi xususiyatlarini anglatadi. U uzoq yerlarni va keng yaylovlarni nazorat qiladi deyiladi. Zardushtiylikda Mitra obrazining rivojlanishi faqat diniy emas, balki siyosiy jarayonlar bilan ham uzviy bog’liq. Dastlab Mehr shaxsiy axloq va haqiqat timsoli sifatida qaralsa, keyinchalik u davlatni himoya qiluvchi, podshohlikning axloqiy asosini yaratadigan kuch sifatida qaralgan. Mitraning obrazidan Eronda, So’g’diyona va Baqtriyada hokimiyatni muqaddaslashtirish vositasi sifatida foydalanilgan.

Shuningdek, ot minayotgan, qurol-yarog’langan jangchi sifatida ham tasvirlanib, Mitra faqat diniy emas, balki ijtimoiy va siyosiy jihatdan ham tartibni saqlovchi kuch sifatida ko’rsatiladi. Avesto

an'anasida "ahriman" kuchlariga qarshi kurashda eng muhim jihatlardan biri — bu ahdga sadoqatdir. Mitra ahdni buzganlarni jazolovchi, sodiqlarni esa himoya qiluvchi kuch sifatida e'tirof etiladi. U insonlar va xalqlar o'rtasidagi ishonch poydevorini ta'minlovchi xudo sifatida talqin qilinadi. Shu bilan bir qatorda tartibga rioya qilmaganlarni jazolash va to'g'ri hayot tarzida yashayotganlarga, qoidalarga rioya qilayotganlarga keng yaylovlar, mo'l hosil va yaxshi chorva berish bilan mukofotlaydi. Bundan tashqari Quyosh bilan bog'liqlik jihati uning eng muhim jihati bo'lib Mitra har tongda quyosh bilan birga osmonga ko'tariladi, bu esa uni nur, hayot va yangilanish bilan bog'laydi.

Avesto matnlarida, ayniqsa Mehr Yashtda, Mitra xudosi nur, haqiqat, tartib va ahd timsoli sifatida ta'riflanadi. Uning obrazi zardushtiylik diniy-falsafiy tizimining asosiy komponentlaridan biri bo'lib, inson va jamiyat axloqini tartibga soluvchi kuchdir. Mitra orqali qadimgi jamiyatning axloqiy ideallari, ijtimoiy qadriyatlari va diniy dunyoqarashi ifodalangan. Shu bois Mitraning Avestodagi aks etishi, nafaqat diniy, balki sivilizatsion taraqqiyot nuqtai nazaridan ham alohida o'ringa ega. Mehr Yasht jami 35 bo'lim, 146 banddan iborat.

"Avesto"ning barcha matnlari singari, "Mihr Yasht" ham ildizlari tarixdan oldingi sivilizatsiyasiga borib taqaladigan marosim shariatiga o'xshab ketadi. Mehr Yashtda "keng yaylovlar egasi, ming ko'zli" deb ulug'langan xudo Mitra, Vedalarda ham Mitra shaklida kelib, unda "shartnoma" tushunchasini o'zida mujassam etgan xudo sifatida paydo bo'lgan. Garchi Rigvedada faqat bitta madhida (3.59) Mitraga bag'ishlangan bo'lsada, u ko'pincha boshqa xudolar, ayniqsa Varuna xudosi bilan birga tasvirlanadi va ular ba'zan birgalikda "mitravaruna" nomi bilan ataladi.

Avestacha Hvare-xshaeta - bu birikma bo'lib, unda hvar "quyosh" stok epiteti sifatida xshaeta "nurli" ga ega. Avestacha hvar [proto-hind-eron tilidagi](#) suhar "quyosh" so'zidan kelib chiqqan bo'lib, [Vedik sanskrit](#) teonimi [Surya](#) atamasi ham undan kelib chiqqan. [O'rta fors](#) tilida Xvare -xshaeta Xvarshed bilan shartnoma tuzilgan bo'lib, yangi fors tilida Xurshed, [Xorshid](#) sifatida davom etgan va Avestocha "Nurli Quyosh" deya tarjima qilinadi.

Qisqa yetti baytdan iborat [6-Yasht Xvare-xshaetaga bag'ishlangan bo'lib, Avestoning](#) Quyosh haqidagi qismi ham hisoblanadi. [Zardushtiylik taqvimining](#) 11-kuni Xvare-xshaetaga bag'ishlangan va uning himoyasi ostida bo'lgan. Garchi an'anaga ko'ra, Xvare-xshaeta oxir-oqibat Quyoshning ilohiyligi sifatida [Mitra](#)ga e'tiqod qilingan bo'lsa ham Avestoda ikkalasi ham Quyosh ilohi sifatida keltirilgan.

Slavyan xudosi [Hors](#), odatda, etimologik jihatdan Xvare-xshaeta bilan bog'liq va, ehtimol, [Fors](#) qo'shinlarining miloddan avvalgi birinchi ming yillikda slavyan xalqlariga quyoshga sig'inish shakllarini joriy etishining natijasidir. Biroq, bu tanqiddan holi emas, chunki ikkala xudo o'rtasidagi etimologik bog'liqlik shubha ostiga qo'yilgan.

Avestodagi Mihr Yasht va Xurshed Yasht qismining o'xshash va farqli tomonlari mavjud: Oo'xshash jihatlardan biri Quyosh va yorug'lik bilan bog'liqlik bo'lib, Mehr Yasht Mitrani ahd va haqiqat posboni, yorug'lik va quyoshning ilohiy timsoli sifatida tasvirlasa, Xurshed Yasht to'liq ravishda Quyosh xudosisiga bag'ishlangan. Har ikkisi ham olamning nur manbai, ijtimoiy tartib va hayotning davomiyligini ta'minlovchi kuch sifatida talqin qilinadi. Ikkinchi o'xshash jihati duo matnlaridagi o'xshashlik hisoblanadi, ya'ni Xvarshed Niyayishn va Mihr Niyayishn matnlarining dastlabki qismlari bir-biriga juda o'xshashdir. Bu holat, Mitra va Quyoshning diniy-falsafiy jihatdan bir-biriga

yaqinligini ko'rsatadi. Ikkalasi ham insoniyat hayotidagi yorug'lik, tartib va adolat manbai sifatida ko'riladi.

Shuningdek farqli jihatlar ham mavjud bo'lib, birinchi farqli jihati hajmi va tuzilishidagi farq hisoblanadi. Xurshed Yasht qisqa bo'lib, atigi 6 baytdan iborat. Shu bois u "Kichik Yasht"lar guruhiga kiradi. Mehr Yasht esa eng uzun Yashtlardan biri bo'lib, 145–146 baytni tashkil etadi. U esa "Katta Yasht"lar qatoriga kiradi. Mazmuni va falsafiy qamrovida ham farqli jihatlarni ko'rishimiz mumkin. Xurshed Yasht asosan Quyoshning nuriy fazilatlarini madh etish, uni hayot manbai sifatida ulug'lashga qaratilgan bo'lsa, Mehr Yasht esa bundan kengroq ko'lamni o'z ichiga oladi: Mitraning ahd va sadoqat timsoli sifatidagi roli, uning ijtimoiy va siyosiy tartibni himoya qilishi, ahdni buzganlarni jazolashi, geografik va ijtimoiy darajadagi hukmronligi batafsil yoritiladi. Ularning vazifalaridagi farqli jihatlarni keltiradigan bo'lsak, Xurshed Yasht asosan tabiat hodisasi sifatida Quyoshni madh etadi. Mehr Yasht esa insoniy munosabatlar, davlat va jamiyat hayotida ahdga sodiqlik va adolat tamoyillarini ta'minlovchi kuch sifatida diniy-ma'naviy ahamiyat kasb etadi.

Qisqa qilib aytadigan bo'lsak, Avestodagi Xurshed Yasht va Mehr Yasht mazmunan bir-biriga yaqin bo'lib, ikkalasida ham quyosh va yorug'lik timsoli markaziy o'rinni egallaydi. Biroq ular hajm, mazmuniy ko'lam va diniy-falsafiy qamrov jihatidan bir-biridan farq qiladi. Xurshed Yasht qisqa bo'lib, asosan quyoshni madh etish bilan chegaralansa, Mehr Yasht keng qamrovli bo'lib, Mitraning ahd, adolat va ijtimoiy tartibni himoya qiluvchi xudo sifatidagi rolini yoritadi. Shu tariqa, bu ikki Yashtning qiyosiy tahlili zardushtiylik diniy-falsafiy tizimida quyosh va yorug'lik g'oyasining naqadar chuqur o'rin tutganini ko'rsatadi.

THE ROLE OF THE COMMUNICATIVE APPROACH IN DEVELOPING STUDENTS' CREATIVE COMMUNICATIVE COMPETENCES

Jumaniyozova Mukhayyo Saparboyevna

National Pedagogical University of Uzbekistan named after Nizami

Phone: +998974591850

Muhayyojumaniyazova98@gmail.com

ABSTRACT

One of the most successful approaches to teaching foreign languages in recent decades is the communicative approach, which places an emphasis on fluency, engagement, and meaningful communication in addition to linguistic accuracy. The capacity of pupils to articulate themselves in real-world situations is sometimes overlooked by traditional techniques, which concentrate on grammatical translation or structure exercises. By emphasizing real-world communication at the core of the learning process, the communicative method, on the other hand, fosters the growth of creative communicative skill. The capacity to utilize language not just accurately but also flexibly, creatively, and culturally is known as creative communicative competence. With this competency, students can solve problems, modify their language to fit changing situations, and create unique statements that are coherent and pertinent. This competency turns into a crucial educational objective in the era of globalization, where cross-cultural communication and creativity are highly prized. Therefore, investigating how the communicative method might improve students' capacity for creative communication has theoretical and practical implications for contemporary teaching.

Keywords: Communicative approach, creative communicative competence, language teaching methodology, learner-centered pedagogy, problem-based learning, higher education, innovation in ELT.

The purpose and goals of the research Analyzing how the communicative approach aids in the growth of students' creative communicative ability is the primary goal of the study.

1. Examining the theoretical underpinnings of the communicative approach to language instruction is one of the particular goals.
2. To determine the ways in which creative communication is promoted by communicative activities.
3. To make methodological suggestions for incorporating communication strategies into instruction in order to enhance students' innovative communication abilities.

Methodology

The study's foundation is a mixed-methods approach. The theoretical framework is based on the writings of Richards & Rodgers (2014), Littlewood (1981), and Hymes (1972), who highlight learner-centered education and communicative competence. The study's empirical component makes use of student questionnaires, classroom observations, and experimental teaching methods with second-year philology students. While qualitative content analysis examines students' speech production, comparative analysis compares communication strategies with more conventional ways. The experimental data is finally validated by statistical techniques (Student's t-test and chi-square test), which also show a quantifiable development in learners' creative communication skills.

Scientific Novelty

This study is unusual because it shows a clear link between the development of creative communication skill and communicative activities (debates, role plays, problem-solving exercises, and pair discussions). In contrast to traditional research that just concentrates on fluency or grammatical correctness, this thesis shows how communicative activities foster learners' creativity, flexibility, and adaptive thinking. Additionally, the research expands the conventional scope of the communicative approach by suggesting an integrated model of communicative teaching that integrates creativity-oriented strategies into the core curriculum.

Theoretical Significance

Through its connections to competence-based education and creative studies, the study broadens the theoretical understanding of communicative language instruction. It offers a fresh paradigm for understanding communicative competence as the capacity to generate original, contextually relevant speech in addition to the ability to utilize language successfully. The combination of educational psychology, pedagogy, and applied linguistics in the study of foreign language learning is strengthened by this theoretical contribution.

Practical Significance

In terms of practice, the thesis provides methodological techniques that are immediately applicable in language learning environments. To encourage creativity in addition to fluency, teachers might use problem-based learning, group projects, and open-ended communicative exercises. These methods inspire students to utilize language creatively rather than just memorize and repeat words. The model created in this study offers flexibility for contemporary higher education systems by being adaptable to a range of educational situations, such as intense courses, blended learning formats, and mobile-assisted environments.

CONCLUSION

A strong methodological basis for improving students' creative communication skills is offered by the communicative approach. This method fosters creativity, flexibility, and confidence in communication by reorienting the emphasis from precise correctness to meaningful engagement and learner-centered activities. The results demonstrate that communicative competence and creativity are interrelated aspects of contemporary language instruction rather than distinct objectives. Thus, it is not only desirable but also necessary to incorporate creativity-oriented communication practices into curriculum in order to adequately prepare students for participation in the global information society.

REFERENCES

- Hymes, D. (1972). *On communicative competence*. In J.B. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 269–293). Penguin.
- Littlewood, W. (1981). *Communicative Language Teaching: An Introduction*. Cambridge University Press.
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and Methods in Language Teaching* (3rd ed.). Cambridge University Press.
- Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1(1), 1–47.
- Larsen-Freeman, D. (2001). *Techniques and Principles in Language Teaching*. Oxford University Press.

- Savignon, S. J. (2002). *Interpreting Communicative Language Teaching: Contexts and Concerns in Teacher Education*. Yale University Press.
- Stern, H. H. (1992). *Issues and Options in Language Teaching*. Oxford University Press.
- Ellis, R. (2003). *Task-based Language Learning and Teaching*. Oxford University Press.
- Widdowson, H. G. (1990). *Aspects of Language Teaching*. Oxford University Press.
- Nunan, D. (2004). *Task-Based Language Teaching*. Cambridge University Press.

**ПОЛИТИЧЕСКАЯ МАНИПУЛЯЦИЯ С ПОМОЩЬЮ ИМИДЖЕОЛОГИИ:
ФОРМИРОВАНИЕ ОБРАЗА ЛИДЕРОВ ЦЕНТРАЛЬНОЙ АЗИИ ВОПРОСЫ
ОБРАЗОВАНИЯ МОЛОДЕЖИ В ЦЕНТРАЛЬНОЙ АЗИИ**

Университет мировой экономики и дипломатии Магистрант факультета прикладной
политологии

Махкамова Рано Анвар қизи

Научный руководитель: **Султанова Эътибор Сидиковна**

Доктор политических наук, профессор

Аннотация: Манипуляция, в частности политическая манипуляция, является высшим типом воздействия на массовое сознание, активно используемый в странах Центральной Азии, да и во мире вообще. Имиджеология занимает особое место в данном процессе, ибо является новообразованием, выполнившим функцию рубежа между PR, психологией и семиотикой тела и формировавшим, закрепившим и транслирующим образ политического лидера. Имиджеология является основополагающим источником политической легитимизации и стабильности власти, преимущественно в условиях авторитарного или полуавторитарного режима, где информационное пространство оккупировано до мелочей.

Ключевые слова: Манипуляция, Центральная Азия, имиджеология, политический имидж, информационное пространство, политический лидер.

ВВЕДЕНИЕ

Манипуляция, в частности политическая манипуляция является мощнейшим оружием воздействия на массовое сознание активно используется в странах Центральной Азии, да и во все мире. И особое значение в этом процессе занимает имиджеология, которая произошла на стыке таких направлений, как PR, психологии и семиотики, которая формирует, укрепляет и транслирует определенный образ политического лидера. Имиджеология является ключевым инструментом политической стабилизации и легитимации власти, в основном в условиях авторитарных или полуавторитарных режимов, где информационное пространство строго под контролем.

Термин «манипуляция» означает использование психологических навыков путем эмоционального давления, ложных обещаний для достижения своих определенных целей. Имиджеология - это универсальная теоретическая и прикладная дисциплина, изучающая психологические закономерности возникновения положительного впечатления и доверительного, доброжелательного отношения между взаимодействующими субъектами. Взаимосвязь между двумя терминами ярко проявляется в политике. Так как имиджеология является основой манипуляции, путем создания и формирования визуального, речевого, смыслового образа (имиджа) политического лидера или игрока для позитивного или негативного восприятия целевой аудитории.

Манипуляция часто использует имиджеологические технологии:

- **Создание «героя» или «врага»** — приёмы имиджеологии формируют определённый архетип, вызывающий доверие/страх/отторжение.

- **Стереотипизация** — использование массовых установок для внедрения нужного образа.
- **Работа с эмоциями** — через образы, метафоры, символы происходит не логическое, а эмоциональное воздействие.

Политическая манипуляция трактуется как скрытое воздействие на общественное сознание с целью формирования выгодного политического поведения, при котором субъект воздействия сохраняет иллюзию самостоятельности (С. Кара-Мурза, 2000). В политических системах с ограниченным плюрализмом, как в большинстве стран Центральной Азии, манипуляция часто подменяет собой полноценный политический диалог. Имиджеология в этом контексте представляет собой систематическую деятельность по формированию благоприятного образа политического лидера, способного вызывать доверие, легитимность и эмоциональную лояльность (И. Панарин, Е. Прохоров). Имидж — не отражение реальности, а сконструированная модель, насыщенная символами и эмоциональными триггерами, которые легко воспринимаются массовой аудиторией. В рамках символической политики (М. Эдельман, 1985), политический лидер превращается в носителя архетипов: отца, защитника, продолжателя традиций. Этот подход тесно связан с работами Б. Андерсона о воображаемых сообществах и А. Грамши — о гегемонии как установлении власти через культуру и образы. Особенно важную роль в Центральной Азии играют неопатримониальные модели лидерства (Л. Ватковская, М. Олкотт), сочетающие элементы традиционной власти (патернализм, культ личности) с современными средствами PR и медийной визуализации. В странах региона наблюдается тенденция к героизации действующих и бывших президентов. Далее мы рассмотрим политический имидж действующих и бывших президентов Центральной Азии.

Политический имидж и образ первого президента Узбекистана Ислама Каримова

Политический имидж Ислама Каримова, первого президента Узбекистана, формировался в контексте постсоветских изменений. Его представляли как гаранта независимости и стабильности. Эти идеи активно транслировались через СМИ и образовательные программы.

Политический имидж и образ действующего президента Узбекистана Шавката Мирзиёева.

Политический образ президента Узбекистана Шавката Мирзиёева начал меняться с его прихода к власти в 2016 году. Это потребовало нового взгляда на то, как его воспринимают. В отличие от статичного образа Ислама Каримова, имидж Мирзиёева сфокусирован на изменениях, открытости к реформам и близости к людям. Это часть общей идеи обновления в политике страны. С точки зрения имиджеологии, Мирзиёев выглядит как новый тип лидера: не культовая фигура, а «работающий президент», который действительно занимается реальными изменениями. Тем не менее, несмотря на все обновления, его образ продолжает использовать манипулятивные методики, чтобы формировать эмоциональную связь с людьми и создать определенное восприятие его личности.

Политический имидж Нурсултана Назарбаева: культ Лидера нации и инструмент легитимации

Политический имидж Нурсултана Назарбаева складывался на фоне постсоветского Казахстана, где власть сосредоточилась в руках одного человека. С начала своего правления Назарбаев активно создавал образ «отца нации», который был объединителем,

модернизатором и символом стабильности. Этот имидж стал важной частью политической культуры Казахстана и использовался для укрепления его власти в условиях, когда другие институты были слабы.

Политический имидж Касым-Жомарта Токаева: между технократизмом и контролируемым обновлением

Политический имидж Касым-Жомарта Токаева формируется в условиях постназарбаевского транзита и характеризуется попыткой балансировать между **преемственностью и обновлением**, а также между **реальной реформаторской риторикой** и сохранением ключевых элементов авторитарной системы. На раннем этапе своего президентства Токаев представлялся как **технократ и дипломат** — фигура переходного характера, но постепенно его имидж приобретал всё более самостоятельные и стратегически выверенные черты.

Политический имидж Эмомали Рахмона: сакрализация власти и постконфликтная легитимация

Политический имидж Эмомали Рахмона, президента Таджикистана с 1994 года, формировался в условиях **глубокого политического кризиса и гражданской войны (1992–1997)**, что предопределило ключевую роль образа лидера как **спасителя и миротворца**. С тех пор он целенаправленно укреплял свою легитимность через **символическую политику, идеологизацию образа и манипулятивные практики имиджеологического влияния**.

Политический имидж Садыра Жапарова: национал-популизм в условиях политической нестабильности

Садыр Жапаров стал президентом Кыргызстана в 2021 году после резкой смены власти, сопровождавшейся массовыми протестами и уходом предыдущего лидера. Его стремительный подъём из тюрьмы на вершину власти стал основой для **формирования уникального имиджа «народного избранника»**, восставшего против системы. Этот образ активно используется как инструмент **политической манипуляции и имиджеологической мобилизации**. Политический имидж Садыра Жапарова — это гибрид **популистской харизмы и патриотического авторитаризма**, встроенный в нестабильный и фрагментированный политический контекст Кыргызстана. Он одновременно обещает реформы и усиливает контроль, позиционируется как антиэлитарий, но формирует свою вертикаль власти. Имиджеология в его случае служит инструментом **легитимации резкого политического подъёма**, а также **манипуляции ожиданиями общества**, уставшего от политического хаоса и коррупции.

В заключении стоит отметить, что имиджеология является важным инструментом в политических процессах и играет ключевую роль в формировании имиджа политических лидеров не только Центральной Азии, но во всем мире. На сегодняшний день, особое внимание уделяется тому, как с помощью СМИ, пиар – технологий формируется образ лидеров. Также важно отметить, что они чаще не повторяют имидж бывших лидеров. Имидж лидеров в Центральной Азии создается с акцентом на национальные, культурные традиции и аспекты, что помогает укрепить связь с населением. Но также значимую роль играют коммуникационные инструменты для формирования положительного образа лидера. Но эффективность имиджеологии зависит и от навыков населения восприятия информации и ее фильтрации.

СПИСОК ИСПОЛЬЗОВАННОЙ ЛИТЕРАТУРЫ:

1. Цит. по: Шашлов М.Н. Политический имидж как актуальный предмет исследования // Актуальные проблемы политологии. М.: МАКС Пресс, 2001. С. 84.
2. Доценко Е.Л. Манипуляция: феномен, механизм, защита. Феноменологическое описание. [Электронный ресурс]. Режим доступа: http://business.polbu.ru/dotsenko_manipul/chOI_i.html/
3. Ольшанский Д.В. Политический PR. — СПб.: Питер, 2003. С.347.
4. Ихсангалиева Г.К. Языковые механизмы формирования имиджа Казахстана. Алматы: Қазақ университеті, 2010.
5. Бокиева Л.Ф. Методы воздействия СМИ Таджикистана на массовую аудиторию // Вестник университета. — Душанбе: РТСУ, 2014. — №2 (45). — С. 246251.

UDC: 664.87:635.62

TECHNOLOGICAL FOUNDATIONS OF PUMPKIN FRUIT DRYING**Genjebayev Marat Sovetovich**

PhD researcher at the Karakalpak Institute of Agriculture and Agrotechnologies

Annotation. The article studies the technology of drying pumpkin fruits and producing powder. After sorting, cleaning, cutting, and thermal treatment, pumpkin was dried using convective, infrared, and sublimation methods. The retention of vitamin C and carotenoids ranged between 68–92% and 70–95% depending on the method. The dried material was ground and packaged into powder form. A comparative analysis of different drying methods was carried out, highlighting their advantages and disadvantages.

Keywords. pumpkin, pumpkin powder, drying technology, convective drying, infrared drying, sublimation drying, vitamin C retention, carotenoids, organoleptic properties, packaging technology. Introduction

Pumpkin (*Cucurbita spp.*) is a widely cultivated crop, grown in more than 70 countries worldwide. The leading producers include China (25 million tons), India (7–8 million tons), Turkey (2.5–3 million tons), Kazakhstan (2–2.5 million tons), and Russia (1.5–2 million tons) [FAO, 2022]. A considerable portion of the harvested yield is used in the food industry, for livestock feed, and for the extraction of oils with nutritional and medicinal properties [Dhiman et al., 2020]. In recent years, scientific research has focused on the development of innovative technologies for processing pumpkin seeds, oil, and peel, resulting in the creation of functional and value-added products [Achu et al., 2018].

The role of pumpkin in the food industry has been steadily increasing due to its high nutritional value, richness in fatty acids, carotenoids, vitamins, and its wide processing potential [Kim et al., 2019]. These characteristics make pumpkin a promising raw material for the production of vegetable oils, functional food ingredients, and dietary supplements [Kulaitienė et al., 2020]. In Uzbekistan, growing attention is being given to the selection of pumpkin varieties and the improvement of processing technologies aimed at producing flour and other value-added products [Mirzaev et al., 2023]. Such efforts are expected to contribute significantly to strengthening food security and ensuring the sustainable growth of agricultural production in the country.

Research Objectives and Specific Tasks

The primary objective of this research is to develop technologies for the storage, drying, and preparation of semi-finished products from pumpkin fruits. These efforts aim to extend the shelf life of pumpkin products, preserve their quality, and improve the efficiency of processing operations.

Materials and Methods

For the study, the following pumpkin cultivars were selected: *Ispanskaya–73* (control), *Kashgarskaya–1644*, *Palov Kadu–268*, *Volzhskaya Seraya–92*, *Medovaya*, *Non Kadi*, and *Kustovaya Oranzhevaya*.

The methodology of the study was as follows:

- Moisture content of pumpkin fruits was determined by the gravimetric method, i.e., drying at a controlled temperature.
- Sugar content was assessed using the colorimetric method.
- Carotenoid levels were measured by spectrophotometry.
- Vitamin C content was determined through titrimetry.
- Fiber composition was analyzed using the Van Soest method.

Technological Approach

Producing pumpkin in powdered form is recognized as an effective method for obtaining functional and value-added products in the food industry. The process begins with mechanical cleaning of the fruits, during which damaged, low-quality, or diseased specimens are removed. Subsequently, two main processing approaches are applied to the selected fruits.

In the first method, pumpkin fruits are cut into pieces according to their geometric shape, which ensures uniform and rapid removal of moisture during drying. The drying process is carried out using convective, infrared, or sublimation technologies, reducing the moisture content to 12–14%. Afterwards, the dried pieces are ground and sieved to obtain a homogeneous powder structure.

Table 1. Drying pumpkin fruits in slices and producing powder

ge	Description	Time	Temperature (°C)	Moisture content (%)
Sorting and cleaning of raw material	Selection of mechanically undamaged fruits with 85–88% moisture and removal of soil and dust	15–20 min	—	85–88
Cutting into slices	Cutting into uniform slices of 1–1.5 cm thickness	10–15 min	—	85–88
Thermal treatment	Blanching at 90–95°C for 2–3 min or treatment with 0.1% sodium bisulfite	2–3 min	90–95	80–82
Drying (convective)	Drying at 60°C for 7–9 h; vitamin C retention $\approx$ 68–70%, carotenoids $\approx$ 70–72%	7–9 h	60	12–14
Drying (infrared)	Drying at 55°C for 6–7 h; vitamin C retention $\approx$ 78–80%, carotenoids $\approx$ 82–85%	6–7 h	55	12–14
Drying (sublimation)	Freezing at –35°C, followed by drying at 25–30°C for 20–24 h;	20–24 h	–35 $\rightarrow$ 25–30	12–14

	vitamin C retention $\approx$ 90–92%, carotenoids $\approx$ 94–95%			
Grinding and sieving	Grinding to 0.3–0.5 mm fraction and sieving using a vibrosieve	10–15 min	—	12–14
Packaging	Vacuum or modified atmosphere (MA) packaging; stable storage for 8–12 months	5–10 min	—	12–14

The technology of producing powder through drying pumpkin fruits in slices is considered one of the practically significant directions in the food industry. This method not only allows seasonal products to be preserved and utilized throughout the year but also ensures a higher retention of vitamins, minerals, and natural pigments. Each stage presented in the technological process serves specific technological and biochemical purposes, directly influencing the final quality of the product. Therefore, detailed scientific analysis of these stages, including the identification of their advantages and limitations, is of critical importance.

The sorting and cleaning of raw materials represent the initial and most essential stage of the process. Pumpkins selected for processing must be free from mechanical damage, disease symptoms, and should be fully mature. Fruits with a moisture content of around 85–88% are considered optimal, as this ensures even water release during drying and preserves the structural integrity of the fruit matrix. Sorting can be conducted manually through visual inspection, with automated sorters, or on conveyor lines with manual labor. This stage also involves the removal of soil, dust, and other impurities, ensuring compliance with hygiene requirements in the subsequent processing stages.

The slicing stage prepares the fruit for the drying process. Cutting pumpkins into uniform slices of 1–1.5 cm thickness allows consistent moisture removal during drying. If the slices are too thick, internal moisture may be retained, while the outer layers dry excessively, leading to spoilage or undesirable changes inside the fruit. Conversely, excessively thin slices may burn or undergo color changes during drying. Thus, from a technological perspective, optimizing slice thickness is a critical factor in ensuring product quality.

The thermal treatment stage is considered one of the most important pre-drying operations. At this stage, pumpkin slices are either blanched at 90–95°C for 2–3 minutes or treated with a 0.1% sodium bisulfite solution. Blanching reduces enzymatic activity, particularly polyphenol oxidase and peroxidase, thereby preventing discoloration. In addition, blanching helps lower the microbial risk level. Sulfitation, on the other hand, ensures color stability, slows down pigment degradation, and minimizes vitamin C loss. However, strict control of concentration and treatment time is required to prevent residual sulfite levels from exceeding sanitary standards.

Drying can be carried out using different methods, each of which has a distinct effect on the biochemical composition and organoleptic properties of the product. Convective drying at around 60°C for 7–9 hours retains approximately 68–70% of vitamin C and 70–72% of carotenoids. Although this method requires relatively high energy consumption due to its long duration, the low temperature

helps preserve the product's flavor and texture. Owing to its simplicity and low cost, convective drying is widely applied, though more efficient alternatives exist for nutrient and pigment preservation.

Infrared drying is performed at 55°C for 6–7 hours. Infrared radiation penetrates both the outer and inner layers of the product, accelerating moisture removal. This method allows vitamin C retention at about 78–80% and carotenoid retention at 82–85%. The advantage of infrared drying lies in its ability to achieve rapid drying at a lower temperature, maintaining the product's color more effectively. It also offers higher energy efficiency compared to convective drying, though equipment costs are significantly higher.

Sublimation (freeze-drying) is recognized as the most advanced method, ensuring the highest product quality. In this process, pumpkin slices are first frozen at –35°C and subsequently dried under vacuum conditions at 25–30°C for 20–24 hours. Sublimation involves the direct conversion of water from the ice state to vapor, bypassing the liquid phase. As a result, vitamin C retention reaches 90–92%, and carotenoids remain at 94–95%. The texture, color, and taste of the product are almost fully preserved. However, the main drawbacks of freeze-drying are the high cost of equipment and energy consumption, limiting its use primarily to premium, high-value products.

The grinding and sieving stage transforms the dried slices into powder form. The dried material is processed using mechanical or turbo grinders to achieve a particle size of 0.3–0.5 mm. It is then passed through a vibrosieve to obtain a homogeneous powder. Uniform particle size is critical for subsequent applications, such as puree production or incorporation into food additives. Careful temperature control during grinding is essential, as excessive heat generated by high-speed processing may cause nutrient losses, particularly vitamin degradation.

The packaging stage is crucial for ensuring the long-term preservation of pumpkin powder and maintaining its quality parameters. Vacuum or modified atmosphere (MA) packaging effectively protects the product from moisture and oxygen exposure. In the MA method, the internal air is replaced with nitrogen or carbon dioxide, thereby slowing down oxidation processes. Under such conditions, pumpkin powder can be stored for 8–12 months without significant loss of vitamins and pigments. For optimal results, the use of laminated films with high oxygen barrier properties is recommended.

Analysis of the technological stages demonstrates that the choice of drying method has a significant impact on the final quality of the product. While convective and infrared drying are cost-effective and efficient, they are inferior to sublimation in terms of nutrient and pigment retention. Freeze-drying provides the highest product quality, but due to its high cost, it is economically feasible mainly for premium products. Infrared drying offers a favorable balance between quality and processing time, making it the preferred method when projects aim to save both energy and time.

REFERENCES

1. FAO. (2022). *FAOSTAT: Crops and livestock products*. Food and Agriculture Organization of the United Nations.
2. Dhiman, A. K., et al. (2020). Nutritional and therapeutic potential of pumpkin (*Cucurbita* spp.). *Journal of Food Science and Technology*, 57(11), 4037–4050.
3. Achu, M. B., et al. (2018). Value-added products from pumpkin seeds and oil. *Food Reviews International*, 34(7), 623–646.

4. Kim, M. Y., et al. (2019). Pumpkin and its bioactive compounds: Nutritional, functional, and industrial perspectives. *Food Chemistry*, 293, 16–27.
5. Kulaitienė, J., et al. (2020). Carotenoid and nutritional composition of different pumpkin varieties. *Plants*, 9(11), 1547.
6. Mirzaev, M., et al. (2023). Development of processing technologies for cucurbit crops in Uzbekistan. *Uzbek Journal of Agriculture and Food Science*, 5(2), 45–53.
7. Dodaev, K. O., Abdukadyrov, I. T., Djuraev, Kh. F., Dodaeva (Maksumova), D. K., Babayarov, R. A., Choriev, A. Zh., Rakhimov, D. A., & Ivanova, I. A. (2002). Особенности переработки бахчевых культур. *Пищевая промышленность*, (11), 40. Moscow.
8. Umidov, Sh. E. (2019). Agrobiological and Technological Peculiarities of Juicy Pumpkin Varieties. *International Journal of Science and Research (IJSR)*, 8(11), 1227–1231. India.

TABLE OF CONTENTS

1	INNOVATSION INFRATUZILMALAR YORDAMIDA YOSHLARNING LOYIHALARINI MOLİYALASHTIRISHGA TAYYORLASH AHAMIYATI Nuriddinov Davronbek Murodiljon o'g'li	3-5
2	O'ZBEK PSIXOLOGLARI QARASHLARIDA KOMPETENTLIK MASALASINING YORITILISHI Erimmetova Nafisa Bahramovna	6-10
3	ZAMONAVIY TA'LIMDA RAQAMLI TEXNOLOGIYALARNING O'RNI. Rustamova Nodira Zokirjon qizi	11-15
4	USING MODERN METHODS IN DEVELOPING AUTONOMY IN FOREIGN LANGUAGE LEARNING Khalilova Farangiz Khoshimovna	16-18
5	ILK TEMIR DAVRI SAK QABILALARINING MADANIYATI Kenjayev Bektash Davronbek o'g'li	19-21
6	СОСТОЯНИЕ АУТОИММУННЫХ ПОКАЗАТЕЛЕЙ ПРИ ДЕТСКОМ ЦЕРЕБРАЛЬНОМ ПАРАЛИЧЕ Шарипов А.Т.	22-25
7	COMPARATIVE ANALYSIS OF PUBLIC BUS SERVICE QUALITY IN TASHKENT BASED ON USER PERCEPTION DATA Bilolidin Khakimov	26-30
8	DIGITAL TRANSFORMATION IN THE BANKING SYSTEM: PROSPECTS FOR COOPERATION BETWEEN FINTECH COMPANIES AND BANKS Gulboyeva Zulfiya , Xolmamatov Farhodjon	31-33
9	SCIENTIFIC-BASED METHODOLOGY FOR STRENGTHENING LOAD PARAMETERS - VOLUME AND INTENSITY IN BAYDARKA AND CANOE ENGAGEMENTS. Khodjiyev Azizjon	34-37
10	THE ROLE OF DIGITALIZATION IN THE NATIONAL SECURITY SYSTEM OF THE REPUBLIC OF UZBEKISTAN Sitara Latipova	38-41
11	FORENSIC MEDICAL ASPECTS OF GUNSHOT INJURIES INFLICTED BY SPECIAL WEAPONS S.A.Khakimov, B.M.Xotamov, D.M.Sirliboyev	42-44
12	THE IMPORTANCE OF ENHANCING STUDENT ENGAGEMENT THROUGH PERSON-CENTERED EDUCATION IN TEACHING BIOETHICS M.R.Salimova	45-48
13	PEDAGOGUE AND VALUE SYSTEM Rakhmonova Nigina Aminjonovna	49-50
14	RESPUBLIKAMIZDA INNOVATSION TADBIKORLIKNI RIVOJLANTIRISH ORQALI BANDLIKNI OSHIRISH Norboyeva Dilnoza Darvishaliyevna, Saparboyeva Madina	51-56
15	AVESTO "YASHT" LARDA MITRANING AKS ETISHI Rahmonberdiyeva Mahkamoy Jo'ra qizi.	57-59

16	THE ROLE OF THE COMMUNICATIVE APPROACH IN DEVELOPING STUDENTS' CREATIVE COMMUNICATIVE COMPETENCES Jumaniyozova Mukhayyo Saparboyevna	60-62
17	ПОЛИТИЧЕСКАЯ МАНИПУЛЯЦИЯ С ПОМОЩЬЮ ИМИДЖЕОЛОГИИ: ФОРМИРОВАНИЕ ОБРАЗА ЛИДЕРОВ ЦЕНТРАЛЬНОЙ АЗИИ ВОПРОСЫ ОБРАЗОВАНИЯ МОЛОДЕЖИ В ЦЕНТРАЛЬНОЙ АЗИИ Махкамова Рано Анвар кизи, Султанова Эйтибор Сидиковна	63-66
18	TECHNOLOGICAL FOUNDATIONS OF PUMPKIN FRUIT DRYING Genjebayev Marat Sovetovich	67-71
	OUTLINE	72-73