

**KADRLAR MALAKASINI OSHIRISH TIZIMIDA HORIJ TA'LIM
SISTEMASIDAN KASBIY MAHORATNI RIVOJLANTIRISHDA
FOYDALANISH**

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Kalit so'zlar. Chet el ilg'or tajribalari, "Ta'lism to'g'risida"gi Qonuni, "Kadrlar tayyorlashning milliy dasturi", AQSH, Angliya, Fransiya, Germaniya, Yaponiya, Rossiya, hamkorlik, ta'lism texnologiyasi, ta'lism modellari.

Annotatsiya. Mazkur maqolada kadrlar malakasini oshirish tizimida horij ta'lism sistemasidan kasbiy mahoratni rivojlanishda foydalanish ta'lism texnologiyalari haqida nazariy-amaliy ma'lumotlarga asoslanib ilmiy izlanishlari natijasida zamonaviy ta'lism jarayonlari bilan yoritilgan.

Ijtimoiy iqtisodiy, ma'naviy – siyosiy islohotlar hayotimizga tobora chuqurroq kirib borayotir. Bu mamlakatimiz taraqqiyotida uzlusiz ustivor yo'nalish sanalgan xalq ta'limi tizimida ham qaror topmoqda. Biroq mamlakatimizda ta'lism islohotini to'liq va izchil amalga oshirish uchun ichki imkoniyatlarning o'zi kamlik qiladi. Buning uchun chet el ilg'or ish tajribalarini ijodiy o'rghanmay, ta'limda jiddiy o'zgarishlarga erishish qiyin. Bunda Yaponiya, Amerika Qo'shma Shtatlari, Rossiya va boshqa chet el tajribalaridan foydalanish maqsadga muvofiqdir.

Iqtisodiy rivojlanish darajasi jihatidan Yaponiya Amerika Qo'shma Shtatlari dan keyin 2-o'rinda turadi. Jahonning ko'zga ko'ringan ruhshunoslari va iqtisodchilari Yaponiya rivojlanishidagi bu ulkan parvozni mamlakatda ta'lism tizimlari taraqqiyotiga berilgan yuqori darajadagi e'tibor samarasi, deya qayd etganlar. Bu bejiz emas. Kunchiqar mamlakat sanalgan bu yurtda ta'lism tizimlarini takomillashtirib borilishiga hukumat, xususiy kompaniyalar, jamoat tashkilotlari, ota-onalar qanchalik omilkorlik bilan yondashayotganliklarini hisobga olsak, jahon ilmiy tadqiqotchilarining yuqoridagi xulosalari asosli ekanligining guvohi bo'lamiz. Tabiiyki, Yaponiya ta'lism tizimlarining yuksak parvozi o'z-o'zidan bo'lgani yo'q. Uning ham o'ziga xos muammolari bo'lgan. Bularni to'liqroq tasavvur qilish uchun mamlakat pedagog tamoyillari va maorif taraqqiyotining tarixiy bosqichlariga nazar tashlash kerak

bo‘ladi. Yapon o‘quv yurtlari zamonaviy kompyuterlar va boshqa o‘quv texnik vositalari bilan to‘la ta’minlanganligiga qaramay, mutaxassislarning fikricha, asosiy e’tibor o‘qituvchi faoliyatiga va darsliklarga qaratilmog‘i kerak. Ularning fikricha, o‘qituvchi va o‘quvchi o‘rtasidagi jonli muloqot o‘rnini har qanday takomillashgan mashina ham bosa olmaydi. Deyarli barcha darsliklar xususiy bosmaxonalarda chop etiladi. Yuqorida qayd etilgan darsliklar boshlang‘iya va quyi o‘rta maktablarda esa pullidir.

Yaponiyadagi o‘qituvchi kadrlar tayyorlash sifatiga juda katta talablar qo‘yiladi. Bu talablar shundayki, mazkur kasbga iqtidorli va yo‘nalishi to‘g‘ri kelmaydigan tasodifiy kishilarning kirib kelishiga yo‘l qo‘yilmaydi. O‘qituvchilar dorilfununlarda to‘rt yillik bakalavr va ikki yillik magistratalarda tayyorlanadi. Bu o‘quv yurtlarining bitiruvchilariga birinchi va ikkinchi darajali guvohnoma beriladi. Maktab direktori bo‘lish uchun birinchi darajali guvohnomaga ega bo‘lishlari shart. Binobarin ularning maoshlari yuqori. 74% o‘qituvchi jamoa va kasb-korlik assotsiyasiga a’zo. Ular kasb mahoratlarini takomillashtirish ustida tinimsiz izlanishlar olib boradilar, ishga tushishdan oldin qirq kun kunduzgi tayyorlov kurslaridan o‘tadilar. Yapon o‘qituvchilari har besh yilda malaka oshirish kurslarida o‘qib qaytadilar. Chunki Yaponiya maktablari dasturi davr taqozosiga ko‘ra har o‘n yilda o‘zgarib, takomillashadi.

Hozirda oliy va o‘rta umum ta’lim maktab tizimida kadrlarni yangi pedagogik va axborot texnologiyalardan keng ko‘lamda foydalanish oldimizda turgan eng muhim vazifalardan biri bo‘lib kelmoqda. Shuning uchun DTSlaridan (davlat ta’lim standartlaridan) kelib chiqib, o‘rta umum ta’lim maktab ta’lim tizimida, o‘qituvchi-kadrlarni malakasini oshirishda, yangi pedagogik va axborot texnologiyalaridan foydalanish eng muhim vazifalardan biridir. Bunda o‘qituvchilarning bilim saviyasi jahon standartlari talablariga javob bera oladigan bo‘lishi lozim. Shuning uchun malaka oshirish tizimida yangi pedagogik va axborot texnologiyalardan foydalanish zarur bo‘lib, buning natijasida yuksak saviyali, chuqur bilimli, zukko hamda raqobatbardosh mutaxassislarni yetishtirish lozim. Jahon andozalariga mos keladigan kadrlarni yetishtirish uchun har uch yilda maxsus markazlashtirilgan malaka oshirish o‘quv yurtlarida mutaxassislarni yangi pedagogik texnologiyalar asosida o‘qitish kerak. Buning uchun “Ta’lim to‘g‘risida”gi Qonun[1] va “Kadrlar tayyorlashning milliy dasturi”[2] hamda O‘zbekiston Prezidentining ta’lim-tarbiya va kadrlar tayyorlash tizimining tubdan isloh qilish, barkamol avlodni voyaga yetkazish to‘g‘risidagi farmonlari malaka oshirish tizimida amalga oshirilayotgan islohotlar uchun asos bo‘lib xizmat qiladi. Shunga ko‘ra malaka oshirish tizimida yangi pedagogik texnologiyalardan foydalanish natijasida sifatli, yetuk mutaxassis-kadrlarni qayta tayyorlash bilan birga ularni xolisona, erkin fikr bildiradigan hamda Ona-Vatanga dildan xizmat qila oladigan barkamol inson-o‘qituvchi, murabbiy bo‘lishlari

uchun ularning ijodiy tafakkurini rivojlantirib, davlat oldida javobgarlikni his qila oladigan har tomonlama yetuk, barkamol yoshlarni tarbiyalay oladigan va komil insonni voyaga yetkaza biladigan qilish darkor. Bunda e'tiborni pedagogik texnologiyalarga qaratish muhimdir. BMT nufuzli idoralaridan biri bo'lgan Xalqaro Yunesko tashkiloti pedagogik texnologiyalarga shunday ta'rif beradi: "Pedagogik texnologiya – bu, ta'lism shakllarini optimallashtirish maqsadida texnik vositalar, inson salohiyati hamda ularning o'zaro ta'sirini inobatga olib, o'qitish va bilish, o'zlashtirishning barcha jarayonlarini aniqlash, yaratish va qo'llashning tizimli metodidir" [3, 10]. Shuni nazarda tutgan holda malaka oshirish tizimida yangi pedagogik texnologiyalarni quyidagicha izohlash mumkin, ya'ni "Ta'lism to'g'risida"gi Qonun [1], "Kadrlar tayyorlash milliy dasturi" [2] talablari asosida ta'lism mazmunini yangilanishi, buni amalga oshirish uchun yangicha yo'llarni izlab topish va bunda pedagogik loyihalardan foydalanish bo'lib, bu – yangilik hisoblanganligi uchun ham "pedagogik texnologiya" tushunchasiga "yangi" so'zini qo'shib, uni "Yangi pedagogik texnologiyalar", – deyish lozim [3, 17].

Ta'lism tizimida kadrlarni malakasini oshirishda yangi pedagogik texnologiyalardan foydalanayotgan ta'lism texnologiyasining predmeti quyidagicha bo'ladi, ya'ni ta'lism tizimini konseptual asoslariga dalil keltirishdan, maqsadlarni qo'yishdan, natijalarni shakllantirishdan, o'quv materiallarini toplash va tuzishdan, ta'lism modelini tanlashdan to'ularni amalga oshirishgacha, ularning optimallik va samaradorlik darajasini baholashgacha bo'lgan ishlarni loyihalashtirishdan iboratdir. Malaka oshirish tizimida, yoki umuman barcha ta'lism-tarbiya tizimlarida yangi pedagogik texnologiyani qo'llash natijasida – o'quv amaliyotini, pedagogik jarayonni qurish va amalga oshirish ixtiyorilik asosida uning har bir elementlarini va bosqichlarini tartibga keltirish, qilingan ishlarning yakuniy natijasiga obyektiv tashhis qo'yish asosida ta'lism texnologiyasini mukammallashtirishga erish kerak. Shundan kelib chiqgan holda aytish mumkinki, o'qituvchi-kadrlarni malakasini oshirishda ta'lism texnologiyasining o'rni salmoqlidir. YUNESKOning ta'rifica: "Ta'lism texnologiyasi – ta'lism modellarini optimallashtirish maqsadida, inson va texnika resurslari va ularning o'zaro ta'sirini hisobga olgan holda butun o'qitish va bilimlarni o'zlashtirish jarayonini yaratish, qo'llash va aniqlash tizimidir" [4, 41]. Tizim esa tartiblangan, o'zaro uzviy bog'langan va birgalikda umumiy funksiyani bajaruvchi elementlar majmuasidir. Bularni hammasini, ya'ni yangi pedagogik texnologiyalarni va uning ta'lism texnologiyalarini hamda uning jahon standartlariga mos kelishini shu bilan birga raqobatbardosh bo'lishini, kuchli bilimli va yuqori saviyaliliginini hammasini birlashtirgan holda o'qituvchi-kadrlarni malaka oshirish tizimida kompyuter texnologiyalaridan, multimedialardan va boshqa texnik qurilmalardan keng foydalanish maqsadga muvofiqdir.

Bundan kelib chiqib, ta’lim tizimida kadrlarni malakasini oshirishda yangi pedagogik texnologiyalardan foydalanish natijasida, o‘qituvchilar mukammal bilimga, yuqori saviyaga, jahon talablariga jovob bera oladigan raqobatbardosh bo‘ladilar. Buning natijasida o‘qituvchilar yetishib kelayotgan yosh avlodni erkin fikrlaydigan, sog‘lom, bilimli, zukko, axloq-odobli va mukammal shaxs sifatida komil inson qilib tarbiyalashi mumkin.

Fan va texnika jadal sur’atlar bilan rivojlanayotgan hozirgi davrda o‘quvchi va o‘qituvchining mehnat unumdorligini oshirish, ya’ni o‘quv-tarbiya jarayonini intensivlashtirish hamda malaka oshirish va qayta tayyorlash tizimida zamonaviy texnik, didaktik vositalardan foydalanish muammosi pedagogika fanining asosiy vazifalaridan biri bo‘lib kelmoqda. Fan-texnikaning rivojlanishi tufayli o‘quvchilarga berilishi zarur bo‘lgan axborot miqdori nihoyat darajada ko‘payib bormoqda. Bu axborotni o‘quvchilarga an’anaviy usul va vositalar yordamida yetkazib berish esa murakkablashmoqda. Buning uchun o‘qituvchi kadrlar yetarlicha bilim, yuqori salohiyatga ega bo‘lishlari lozim. Shularni nazarda tutgan holda o‘qituvchilar didaktik vositalar majmuasidan unumli foydalanishlari, dars jarayonida konkret uslubiy va texnik imkoniyatlarga tayanishlari, ulardan ma’ruzalarda, seminarlarda, amaliy mashg‘ulotlarda va laboratoriya ishlarida keng miqyosda foydalanishlari shart.

Malaka oshirish va qayta tayyorlash tizimida didaktikaning barcha prinsiplari texnika vositalaridan foydalanilganda tashkil qilingan ta’lim-tarbiya jarayonida yuqori samara berishi ko‘zda tutilsa, bu jarayonda pedagog-olimlarning izlanishlari ta’lim kompleksini didaktik vositalar yordamida boyitishi kerak bo‘ladi. Shuni nazarda tutgan holda, didaktikaning quyidagi masalalarini hal qilishga erishish mumkinligini ko‘rsatdi, bular quyidagilardir: ta’limning ilmiylik va sistemaligini ta’minalash; ko‘rgazmalilikni oshirish; tinglovchilarning bilim olishga ishtiyoqini oshirish; o‘quv materialini o‘rganish va o‘zlashtirish sur’atini tezlashtirish; ta’limni individuallashtirish; bilimlarning o‘zlashtirilishini nazorat sistemasini amalga oshirish; ma’lumotni uzatish va ular tomonidan qayta ishslash sur’atini amalga oshirish; tinglovchilarning darsga bo‘lgan e’tiborini kuchaytirish; tinglovchilarda mustaqil bilim olish malaka va ko‘nikmalarini hosil qilish.

Ta’lim beruvchi texnika vositalari (kompyuterlar, elektron darsliklar, Internet tizimi va boshqalar) – o‘quv informatsiyasi (axboroti) bo‘yicha tinglovchilar tamonidan o‘zlashtirilishi kerak bo‘lgan ma’lumotlarni yetkazib beruvchi texnik vositalardir. Axborot beruvchi texnika vositalariga turli elektromexanik asboblar, mashg‘ulotda demonstratsiya qilinuvchi jarayonlarni ko‘rsata oluvchi demonstratsion ossillograflar va uning o‘lchov asboblari, shuningdek magnitafon, televizor, kinoproyektor, dioproyektor, kodoskopni hamda shunga o‘xhash kombinatsiyalangan televizion va videomagnitafon apparatlariga ega bo‘lgan tovushli kinoni kiritish mumkin. O‘quv jarayonlarida barcha fanlarni o‘qitish uchun videoproyektor deb

ataluvchi qurilma mavjud bo‘lib, bu qurilma yordamida foydalanuvchining kompyuter ekranidagi tasvir katta ekranga o‘tkaziladi va kursni eshituvchilarga to‘g‘ridan-to‘g‘ri ko‘rinib turadi, ularning bilim olish imkoniyatini kengaytiradi.

Hozirgi paytda auditoriyada o‘qitishda zamonaviy kompyuter texnologiyalarining barcha turlaridan foydalanish imkoniyatlarini beruvchi dastur “Lektor” tizimi mavjud. Bu esa masofadan turib o‘qitishda juda qo‘l keladi hamda malaka oshirish va qayta tayyorlash tizimida uni qo‘llasak zamonaviy yetuk kadrlarga ta’lim berishda juda ko‘p har tomonlama qulayliklar keltirib chiqaradi. Buning natijasida ma’lum bir uzrli sabablarga ko‘ra malaka oshirish o‘quv yurtlariga kela olmagan tinglovchilar ham malaka oshirish imkoniyatiga ega bo‘ladilar. Yuqoridagilardan tashqari, biz “Lektor” tizimining quyidagi imkoniyatlariga ega bo‘lamiz:

1. Kompyuter ekranida proyektlab turib va shu paytda kompyuterni to‘la nazorat qilib turish;
2. Biz nima chizsak va yozsak bir vaqtida hammasini yozib borish. “Lektor” sensorlari va elektron ruchkadan foydalanib, biz ekrandagi funksiyalarni boshqarishimiz, xuddi shu ishlarni sichqoncha yordamida xam bajarishimiz mumkin;
3. Bir hujjatda audio, grafika va matn malumotlarni birlashtira olish;
4. “Lektor” multimedia hujjatlarini oson almashtirish imkoniyati. Multimedia imkoniyatlaridan foydalanib, prezentatsiyalar hosil qilish (ovozi, videolarni yozish va h.k.);
5. Real vaqt mobaynida auditoriya oldida maruza, yoki prezentatsiyalarni sonli proyektordan foydalanib hosil qilish.

“Lektor” tizimi instrumentlar panelidan foydalanib, to‘g‘ri chiziqlar, yo‘naltiruvchi belgilar, ellipslar, to‘rtburchaklar, ko‘pburchaklarni chizish.

Shunday qilib, yuqoridagilardan malaka oshirish va qayta tayyorlash tizimida zamonaviy texnik hamda didaktik vositalardan keng miqyosda foydalanilsa, kelajakda yetuk kadrlarning yuksak saviyali bo‘lishlariga erishiladi. Natijada mustaqil O‘zbekistonning yosh avlodga mukammal ta’lim-tarbiya beruvchi chuqur bilimli o‘qituvchi-kadrlarni tayyorlash o‘zining salmoqli samarasini beradi.

Xulosa qilib shuni aytish kerakki, Yaponiyada ta’lim tizimi ham shaklan, ham mazmunan yuksak uyg‘unlik kasb etgan. E’tiborli yana bir tomoni – Yaponiyada faqat milliy an’analar bilan cheklanib qolmay, jahondagi Amerika, Fransiya, Germaniya kabi taraqqiy etgan mamlakatlarning ilg‘or pedagogik ish tajribalari ham ijodiy o‘zlashtirilgan. Bunday tajriba yangilanish jarayonini kechirayotgan mustaqil Respublikamiz ta’lim tizimini yanada yuqori pog‘onaga ko‘tarishda qo‘l kelishi shubhasizdir. Shuning uchun ham mustaqilligimizning dastlabki yillaridan boshlaboq chet ellik hamkasblarimiz bilan hamkorlik ishlari keng yo‘lga qo‘yilmoqda. Keyingi ikki yillar ichida Respublika mutaxassislari, pedagogik kadrlar tayyorlovchi va shu

sohada ilmiy tadqiqot o'tkazuvchi institutlarning ilmiy xodimlari, o'qituvchilar AQSH, Angliya, Fransiya, Germaniya, Yaponiya, Rossiya va boshqa davlatlarda bo'lib, bu mamlakatlardagi ta'lim tizimi, uning rivojlanish bosqichlari va boshqa sohalarni o'rGANIB, ko'pchiligi bilan o'zaro hamkorlik aloqalari o'rnatmoqdalar. Shu nuqtayi nazardan qaraganda, rivojlangan mamlakatlar ta'lim tizimlarida o'rGANISHIMIZ va amaliyotga tadbiq etishimizda arzigulik boy manba mavjud.

Foydalanilgan adabiyotlar ro'yxati:

1. O'zbekiston Respublikasining "Ta'lim to'g'risida"gi Qonuni. /Barkamol avlod–O'zbekiston taraqqiyotining poydevori.-T.:Sharq.-1997y.20-29-b.
2. Kadrlar tayyorlash milliy dasturi. /Barkamol avlod–O'zbekiston taraqqiyotining poydevori. -T.: Sharq. -1997y. 31-61-betlar.
3. B.Q.Xo'jayev, Sh.SH.Olimov. Yangi pedagogik texnologiyalar. Nazariya va amaliyot. –Buxoro: Buxoro nashriyoti. -2004 y. –120b. 10-bet.
4. A.A.Abduqorov va boshqalar. Axborot texnologiyalari. –T.: -2002y.
5. Aripov M.M. va boshqalar. Informatika, informatsion texnologiyalar (1-qism). –T.: "TDTU". -2002 y. 330 b.
6. Zaripova G.K. Dars jarayonida va undan tashqari tadbirlarda o'quvchi shaxsini shakllanishida hamda uning kasb egallashida o'rta umumiyligini ta'lim maktabidagi tarbiyaning yetakchi ahamiyati: Vol. 42 No. 1 (2024): ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ | Выпуск журнала № 42 | Часть-1. 76-92. https://scholar.google.com/scholar_url?url=http://newjournal.org/index.php/01/article/view/12326&hl=ru&sa=X&d=13592918638829847184&ei=mab_Zeb2LY-Sy9YP6ICD0Ak&scisig=AFWwaeb2ncyTQaARMr4goepKrrff&oi=scholaralrt&hist=1xFAx7AAAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUL0syXIb&html=&pos=2&folt=cit&fols=
7. Zaripova G.K. Madaniyatshunoslik yondashuvi asosida o'qituvchilar umumiyligini ta'lim maktabi o'quvchilarini ma'naviy-ma'rifiy tarbiyalash tizimida o'z-o'zini tarbiyalashni shakllantirishining ahamiyati: Vol. 42 No. 1 (2024): ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ | Выпуск журнала № 42 | Часть-1. 50-57. https://scholar.google.com/scholar_url?url=http://newjournal.org/index.php/01/article/view/12324&hl=ru&sa=X&d=11741118385377896405&ei=mab_Zeb2LY-Sy9YP6ICD0Ak&scisig=AFWwaeYAgP8PeiLgFmNT9BSWSZy3&oi=scholaralrt&hist=1xFAx7AAAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUL0syXIb&html=&pos=3&folt=cit&fols=
8. Зарипова Г.К. Духовно-педагогическая роль самообразования в формировании учащихся общеобразовательных школ как совершенных людей: Vol. 42 No. 1 (2024): ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ | Выпуск журнала № 42 | Часть-1. 58-75. https://scholar.google.com/scholar_url?url=http://www.newjournal.org/index.php/01/article/

[view/12325&hl=ru&sa=X&d=9735756815312938566&ei=mab_Zeb2LY-Sy9YP6ICD0Ak&scisig=AFWwaeY6jJD0R6zSIfDr7G-lp5BC&oi=scholaralrt&hist=1xFAx7AAAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUL0syXIb&html=&pos=4&folt=cit&fols=](https://scholar.google.com/scholar_url?url=http://newjournal.org/index.php/new/article/download/12317/11940&hl=ru&sa=X&d=11771490114323368116&ei=mab_Zeb2LY-Sy9YP6ICD0Ak&scisig=AFWwaeY6jJD0R6zSIfDr7G-lp5BC&oi=scholaralrt&hist=1xFAx7AAAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUL0syXIb&html=&pos=4&folt=cit&fols=)

9. Zaripova G.K. The leading importance of education in a secondary school in the formation of the student's personality during the lesson process and in events outside him and in his profession: Journal of new century innovations. Vol. 49 No. 1 (2024), Volume-49. Issue-1, 148-163.
https://scholar.google.com/scholar_url?url=http://newjournal.org/index.php/new/article/download/12317/11940&hl=ru&sa=X&d=11771490114323368116&ei=mab_Zeb2LY-Sy9YP6ICD0Ak&scisig=AFWwaeQXWfIvnwCGSnZsvFNQYc8&oi=scholaralrt&hist=1xFAx7AAAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUL0syXIb&html=&pos=1&folt=cit&fols=

10. Zaripova G.K. Umumiyo‘rtalim muktablarida o‘quvchi shaxsini shakllanishida pedagogik yondashish va uning kasb egallashida yetakchi ahamiyati: - Buxoro: “PEDAGOGIK MAHORAT” ilmiy-nazariy va metodik jurnal. 2023, № 9. 98-106- betlar.
https://buxdu.uz/media/jurnallar/pedagogik_mahorat_9_2023.pdf.
https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAAJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAJ:_axFR9aDTf0C

11. Shafiyev T.R. Development of a mathematical model and an efficient computational algorithm for predicting atmospheric pollution in industrial regions. AIP Conference Proceedings, 2024.

https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=t6yS4uUAAAAJ&sortby=pubdate&citation_for_view=t6yS4uUAAAAJ:qlx8FJ1GzNcC

12. Shafiyev T.R. Masofaviy va elektron ta“ limning modellari va nazariyasi: masofaviy va elektron ta“ limning modellari va nazariyasi. (Buxdu. uz): Tom 1 № 1, 42 tom (2020): Maqola va tezislardan toplami. 2023.
https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=t6yS4uUAAAAJ&sortby=pubdate&citation_for_view=t6yS4uUAAAAJ:M3ejUd6NZC8C

13. Shadmanov, T. Shafiyev. Mathematical modeling of the processes of combined heat and moisture transfer during storage and drying of raw cotton. E3S Web of Conferences, 2023.

https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=t6yS4uUAAAAJ&sortby=pubdate&citation_for_view=t6yS4uUAAAAJ:Wp0gIr-vW9MC

14. T. Shafiev, S. Nazarov. Studies of the influence of vegetation cover on the process of transfer and diffusion of harmful substances in the atmosphere. E3S Web of

Conferences, 2023.

https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=t6yS4uAAAAAJ&sortby=pubdate&citation_for_view=t6yS4uAAAAAJ:4TOpqqG69KYC

15. Shafiyev T.R. Technology And Relevance Of Creating An Electronic Training Course. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 2021.
https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=t6yS4uAAAAAJ&sortby=pubdate&citation_for_view=t6yS4uAAAAAJ:K1AtU1dfN6UC

16. Shafiyev T.R. Нелинейная математическая модель процесса переноса и диффузии вредных веществ в атмосфере с учетом переменной скорости частиц и орографии местности. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 2020.

https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=t6yS4uAAAAAJ&sortby=pubdate&citation_for_view=t6yS4uAAAAAJ:5nxA0vEk-isC

17. Eshankulov H.I. Multi-agent tizimining business intelligence integratsiyasi uchun petri to'ri asosidagi modeli. DIGITAL TRANSFORMATION AND ARTIFICIAL . 90-99-bet. 2-tom. 2024.

https://scholar.google.ru/citations?view_op=view_citation&hl=ru&user=vgUt64gAAAAJ&sortby=pubdate&citation_for_view=vgUt64gAAAAAJ:BqipwSGYUEgC

18. Eshankulov H.I. Business intelligence dasturlarini bulutga ko'chirish va bulutli hisoblashning asosiy vazifalari. DIGITAL TRANSFORMATION AND ARTIFICIAL INTELLIGENCE 1 (4), 1-7. 2023.

https://scholar.google.ru/citations?view_op=view_citation&hl=ru&user=vgUt64gAAAAJ&sortby=pubdate&citation_for_view=vgUt64gAAAAAJ:YFjsv_pBGBYC

19. Eshankulov H.I., Zaripova G.K. va boshqalar. Mathematical model for information monitoring system of fat and oil enterprises. AIP Conference Proceedings 3004 (1). 2024.

https://scholar.google.ru/citations?view_op=view_citation&hl=ru&user=vgUt64gAAAAJ&sortby=pubdate&citation_for_view=vgUt64gAAAAAJ:JV2RwH3_ST0C

20. Eshankulov H.I. Katta ma'lumotlar (Big Data) ni tahlil qilish usullari. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 2021.

https://scholar.google.ru/citations?view_op=view_citation&hl=ru&user=vgUt64gAAAAJ&sortby=pubdate&citation_for_view=vgUt64gAAAAAJ:isC4tDSrTZIC

21. Eshankulov H.I. Ontologik yondashuv orqali integratsiyalash usullarining tahlili. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 2021. 8 том.
https://scholar.google.ru/citations?view_op=view_citation&hl=ru&user=vgUt64gAAAAJ&sortby=pubdate&citation_for_view=vgUt64gAAAAAJ:bEWYMUwI8FkC

22. Зарипова Г.К. Духовно-педагогическая роль самовоспитания в формировании учащихся общеобразовательных школ как совершенных личностей: - Бухоро: ‘PEDAGOGIK MAHORAT’ ilmiy-nazariy va metodik jurnal. 2023, № 13. 161-169- бетлар. https://buxdu.uz/media/jurnallar/pedagogik_mahorat_10_2023.pdf.
https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAAJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAJ:86PQX7AUzd4C
23. Зарипова Г.К. Миллий меросимиздаги педагогик технологияга оид ғоялардан фойдаланиш: “Узлуксиз таълим”. – Тошкент: 2005 й. – № 1. – Б. 35-40. https://scholar.google.com.vn/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAJ:URolC5Kub84C
24. Zaripova G.K. Masofaviy ta’lim tizimida ilg’or pedagogik texnologiyalardan foydalanish usullari: “Fizika, matematika va informatika”. – Toshkent. 2014 y. – №5. – B.114-118. https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAAJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAJ:SpbeaW3-B0C
25. Zaripova G.K. Informatika va axborot texnologiyalari fanini o’qitishda yangi pedagogik texnologiyalardan ta’lim tizimida foydalanish: “Fizika, matematika va informatika”. – Toshkent. – 2014 y. – №3. – Б.6-9. https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAAJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAJ:e_rmSamDkqQC
26. 26. Зарипова Г.К. INTERNETдан фойдаланиш этикаси: “Халқ таълими”. – Тошкент: 2006 й. – №1. – Б. 75-77. https://scholar.google.com.vn/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAJ:BwyfMAYsbu0C
27. Zaripova G.K. Informatika va axborot texnologiyalarining jamiyat taraqqiyotida o’rni va istiqbollari: “Fizika, matematika va informatika”. – Toshkent. - 2012 y. – №4. – B.6-9. https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAAJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAJ:kz9GbA2Ns4gC
28. Eshankulov H.I., Zaripova G.K. va boshqalar. Mathematical model for information monitoring system of fat and oil enterprises. International scientific and practical conference on “Modern problems of applied mathematics and information technology (MPAMIT2022)” 11–12 May 2022, Bukhara, Uzbekistan, AIP Conf. Proc. 3004, 060008(2024) <https://doi.org/10.1063/5.0199923>.

- https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAAJ&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:kh2fBNsKQNwC
29. Зарипова Г.К. “Информатика ва ҳисоблаш техникаси асослари” фанини узлуксиз ўқитиши муаммолари:“Узлуксиз таълим”. – Тошкент:2005 й. – № 6. – Б. 68-70.
https://scholar.google.com.vn/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAA&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:AvfA0Oy_GE0C
30. Zaripova G.K. Agarki bu insonni avliyo desak...: “Boshlang’ich ta’lim”.– Toshkent: 2006
 y. –№1. –B. 6-7.
https://scholar.google.com.vn/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAA&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:vbGhcppDl1QC
31. Zaripova G.K. Future specialists – spiritual and professional education of secondary school students – a need for the development of our independent country:Educational Research in Universal Sciences, 2(9), 97–105. Retrieved from <http://erus.uz/index.php/er/article/view/3872>.
http://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAAJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:VLnqNzywnoUC
32. Зарипова Г.К. Педагогический подход в формировании личности учащегося в общей средней школе и его значение лидера в получении профессии: VOLUME 2, SPECIAL ISSUE 10 SEPTEMBER 2023. ISSN: 2181-3515. 8-22-стр. https://t.me/Erus_uz Educational Research in Universal Sciences, 2(10), 8–22. Retrieved from <http://erus.uz/index.php/er/article/view/3794>.
https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAAJ&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:j8SEvjWINXcc
33. Zaripova G.K. Building the professional competence of globally competitive teachers in digital and information and communication technologies:Journal of Survey in Fisheries Sciences. 10(3S) 2254-2264. 2023. 2254-2264- pages.
<https://sifisheressciences.com/journal/index.php/journal/article/view/844/837>.
34. https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAAJ&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:-_dYPAW6P2MC
35. Zaripova G.K. Development of professional competence of specialists in the training of teachers in digital and information technologies in our society:- Buxoro: Pedagogik Mahorat. 2022. (maxsus son). 36-43- betlar.
http://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAAJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:PVjk1bu6vJQC
36. Zaripova G.K. In the continuous education system, upgrading and retraining of pedagogic personnel is the current demand. “ACADEMICIA: An International Multidisciplinary

- Research Journal". ISSN: 2249-7137. Vol. 12, Issue 06, June 2022 SJIF 2022 = 8.252. A peer reviewed journal. — Page. 8.
[http://journal.buxdu.uz/index.php/journals_buxdu/article/view/7954/5040;](http://journal.buxdu.uz/index.php/journals_buxdu/article/view/7954/5040)
https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAA AJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:Tiz5es2fbqcC
37. Зарипова Г.К. Методы использования программами архиваторов в архивировании и резервировании информации: МЕЖДУНАРОДНЫЙ НАУЧНЫЙ ЖУРНАЛ «ИНТЕРНАУКА» №2 (24) /2017 1 т. 140-142-стр.
https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAA AJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:9yKSN-GCB0IC
38. Зарипова Г.К. Обучения студентов компьютерным технологиям: Российская федерация. «Готовим урок». – Курск: – 2016 г. 30 июнь. Свидетельство о регистрации СМИ: ЭЛ № ФС 77 – 65563. http://gotovimurok.com/?page_id=28459; http://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAA AJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:q3CdL3IzO_Q C
39. Zaripova G.K. Internet tarmogidan foydalanish ko'nikmalari va uning jamiyat rivojlanishidagi ahamiyati: "Maktab va hayot". – Toshkent. 2015 y. – №7. – B.24-26. https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAA AJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:HbR8gkJAVGI C
40. Zaripova G.K., Avezov A.A., Qobilov K.H. Developing the implementation of the digital technologies' tendency in the training of future teachers. European Journal of Molecular & Clinical Medicine ISSN 2515-8260 Volume 09, Issue 07, 2022. WOS. 5547- 5563- pages. https://www.ejmcm.com/article_20660.html; https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAAAJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:5U14iDaHHb8C
41. Zaripova G.K. Umumiy o'rta ta'lif maktabi o'quvchilarining yosh va individual xususiyatlarini hisobga olish – ular tarbiyasi samaradorligini oshirishning muhim faktoridir: "TA'LIM VA INNOVATSION TADQIQOTLAR" "ОБРАЗОВАНИЕ И ИННОВАЦИОННЫЕ ИССЛЕДОВАНИЯ" "EDUCATION AND INNOVATIVE RESEARCH." ISSN 2181-1709 (P); ISSN 2181-1717 (E); SJIF: 3.805 (2021). 2024/1. 288-296-betlar.
https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAA AJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:YohjEiUPhakC
42. Zaripova G.K. The Problem of Employment in the Digital Economy in the Government of the Russian Federation: Academic Journal of Digital Economics and Stability 2024,

Volume 37, Issue 2, feb-2024, ISSN 2697-2212. 1-7.

<https://economics.academicjournal.io/index.php/economics/article/view/885/847>,

<https://economics.academicjournal.io/index.php/economics/>.

https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAA AJ&pagesize=80&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:rmuvC79q63o C

43. Zaripova G.K. Spiritual and pedagogical role of self-education in the formation of general secondary schools students as perfect persons:Journal of new century innovations. Vol. 49 No. 1 (2024), Volume-49. Issue-1, 133-142. [https://www.newjournal.org; http://www.newjournal.org/index.php/new/issue/view/337; https://scholar.google.com/scholar_url?url=http://www.newjournal.org/index.php/new/article/view/12315&hl=ru&sa=X&d=13700377225825864947&ei=mab_Zeb2LY-Sy9YP6ICD0Ak&scisig=AFWwaeY81IU2g4d6b61RJnlJCsQd&oi=scholaralrt&hist=1xF Ax7AAAAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUI0syXIb&html=&pos=0&folt=cit&fols="](https://www.newjournal.org; http://www.newjournal.org/index.php/new/issue/view/337; https://scholar.google.com/scholar_url?url=http://www.newjournal.org/index.php/new/article/view/12315&hl=ru&sa=X&d=13700377225825864947&ei=mab_Zeb2LY-Sy9YP6ICD0Ak&scisig=AFWwaeY81IU2g4d6b61RJnlJCsQd&oi=scholaralrt&hist=1xF Ax7AAAAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUI0syXIb&html=&pos=0&folt=cit&fols=)
44. Zaripova G.K. Umumiy o’rta ta’lim o’quvchilarini komil shaxs sifatida shakllantirishda o’zi-o’zini tarbiyalashning ma’naviy-pedagogik o’rni: “PEDAGOGIK AKMEOLOGIYA” xalqaro ilmiy-metodik jurnal «ПЕДАГОГИЧЕСКАЯ АКМЕОЛОГИЯ» международный научно-методический журнал “PEDAGOGICAL ACMEOLOGY” international scientific-methodical journal. №1(3) 2024. https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=1xFAx7AAAAA AJ&sortby=pubdate&citation_for_view=1xFAx7AAAAAAJ:nrtMV_XWKgEC
45. Зарипова Г.К. Ведущее значение образования в средней общеобразовательной школе в формировании личности учащегося в процессе урока и в событиях вне него и в его профессии: Journal of new century innovations. Vol. 49 No. 1 (2024), Volume-49. Issue-1, 161-184.
46. [https://scholar.google.com/scholar_url?url=http://newjournal.org/index.php/new/article/download/12317/11940&hl=ru&sa=X&d=11771490114323368116&ei=mab_Zeb2LY-Sy9YP6ICD0Ak&scisig=AFWwaeaQXWfIvnwCGSnZsvFNQYc8&oi=scholaralrt&hist=1xFAx7AAAAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUI0syXIb&html=&pos=1&folt=cit&fols="](https://scholar.google.com/scholar_url?url=http://newjournal.org/index.php/new/article/download/12317/11940&hl=ru&sa=X&d=11771490114323368116&ei=mab_Zeb2LY-Sy9YP6ICD0Ak&scisig=AFWwaeaQXWfIvnwCGSnZsvFNQYc8&oi=scholaralrt&hist=1xFAx7AAAAAAJ:4401037987834098197:AFWwaebLEXpCNrB4TedFUI0syXIb&html=&pos=1&folt=cit&fols=)