

BLOKCHEYN TEXNOLOGIYASI ASOSIDA TA'LIMDA BAHOLASH NATIJARINING ISHONCHLILIGINI TA'MINLASH TIZIMINI YARATISH TAHLILI

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Annotatsiya: Mazkur tadqiqotda blokcheyn texnologiyasi asosida ta'lim jarayonida baholash natijalarining ishonchliligi, shaffofligi va o'zgarmasligini ta'minlash tizimini yaratish masalalari tahlil qilinadi. Blokcheynning markazlashmagan tuzilmasi orqali baholash ma'lumotlarini soxtalashtirishning oldini olish, natijalarni xavfsiz saqlash hamda barcha manfaatdor tomonlar uchun ochiq va tekshiriladigan mexanizm yaratish imkoniyatlari yoritib beriladi. Shuningdek, ta'lim tizimida raqamli baholash jarayonlarini takomillashtirishda blokcheyn texnologiyasining afzalliklari va qo'llash istiqbollari ko'rib chiqiladi.

Kalit so'zlar. blokcheyn texnologiyasi, ma'lumotlar xavfsizligi, raqamli baholash, markazlashmagan tizim, akademik halollik, axborot texnologiyalari.

Аннотация: В данном исследовании анализируются вопросы создания системы обеспечения надежности, прозрачности и неизменности результатов оценивания в образовательном процессе на основе технологии блокчейн. Децентрализованная структура блокчейна подчеркивает возможности предотвращения фальсификации данных оценивания, обеспечения безопасности результатов и создания открытого и проверяемого механизма для всех заинтересованных сторон. Также рассматриваются преимущества и перспективы использования технологии блокчейн для улучшения процессов цифрового оценивания в системе образования.

Ключевые слова: технология блокчейн, безопасность данных, цифровое оценивание, децентрализованная система, академическая честность, информационные технологии.

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Abstract: This study analyzes the issues of creating a system for ensuring the reliability, transparency and immutability of assessment results in the educational process based on blockchain technology. The decentralized structure of the blockchain highlights the possibilities of preventing falsification of assessment data, keeping the results safe, and creating an open and verifiable mechanism for all stakeholders. It also examines the advantages and prospects of using blockchain technology in improving digital assessment processes in the education system.

Keywords: blockchain technology, data security, digital assessment, decentralized system, academic integrity, information technology.

Raqamli transformatsiya jarayonlari jamiyatning barcha sohalarida, jumladan ta'lim tizimida ham tub o'zgarishlarni yuzaga keltirmoqda. Zamonaviy ta'lim muhitida bilimlarni baholash jarayoni nafaqat o'quvchilar va talabalar bilim darajasini aniqlash, balki ta'lim sifatini ta'minlash, raqobatbardosh kadrlar tayyorlash hamda akademik halollikni mustahkamlashda muhim ahamiyat kasb etadi. Shu bois baholash natijalarining aniqligi, ishonchliligi va shaffofligi ta'lim tizimining eng muhim ko'rsatkichlaridan biri hisoblanadi.

Bugungi kunda ko'plab ta'lim muassasalarida baholash natijalari markazlashgan axborot tizimlarida saqlanadi. Bunday tizimlar inson omiliga yuqori darajada bog'liq bo'lib, ma'lumotlarning ruxsatsiz o'zgartirilishi, yo'qolishi yoki soxtalashtirilishi kabi xavflarni yuzaga keltiradi. Bu holat esa ta'lim jarayoniga bo'lgan ishonchni pasaytiradi va baholash natijalarining haqqoniyligiga shubha tug'diradi.

Shu nuqtai nazardan, ta'limda baholash jarayonlarini himoyalash va ishonchli mexanizmlar asosida tashkil etish dolzarb vazifaga aylanmoqda. Blokcheyn texnologiyasi o'zining markazlashmagan, o'zgarimas va shaffof ma'lumotlar bazasi xususiyatlari bilan ushbu muammoni hal etishda samarali vosita sifatida qaralmoqda. Ushbu maqolada blokcheyn texnologiyasining ta'limda baholash natijalarini ishonchli saqlash va boshqarishdagi imkoniyatlari, afzalliklari hamda uni amaliyotga joriy etish masalalari keng qamrovda tahlil qilinadi.

Blokcheyn texnologiyasining mohiyati

Blokcheyn — bu ma'lumotlarni ketma-ket bog'langan bloklar ko'rinishida saqlovchi markazlashmagan raqamli reyestrdir. Har bir blok avvalgi blok bilan kriptografik usulda bog'lanadi, bu esa kiritilgan ma'lumotlarni keyinchalik o'zgartirishni deyarli imkonsiz qiladi. Blokcheynning asosiy xususiyatlariga shaffoflik, xavfsizlik, ishonchlilik va markazlashmagan boshqaruv kiradi.

Ta'limda baholash tizimlaridagi muammolar

An'anaviy ta'lim baholash tizimlarida quyidagi muammolar mavjud:

baholash natijalarining soxtalashtirilishi;

inson omiliga bog'liqlik;

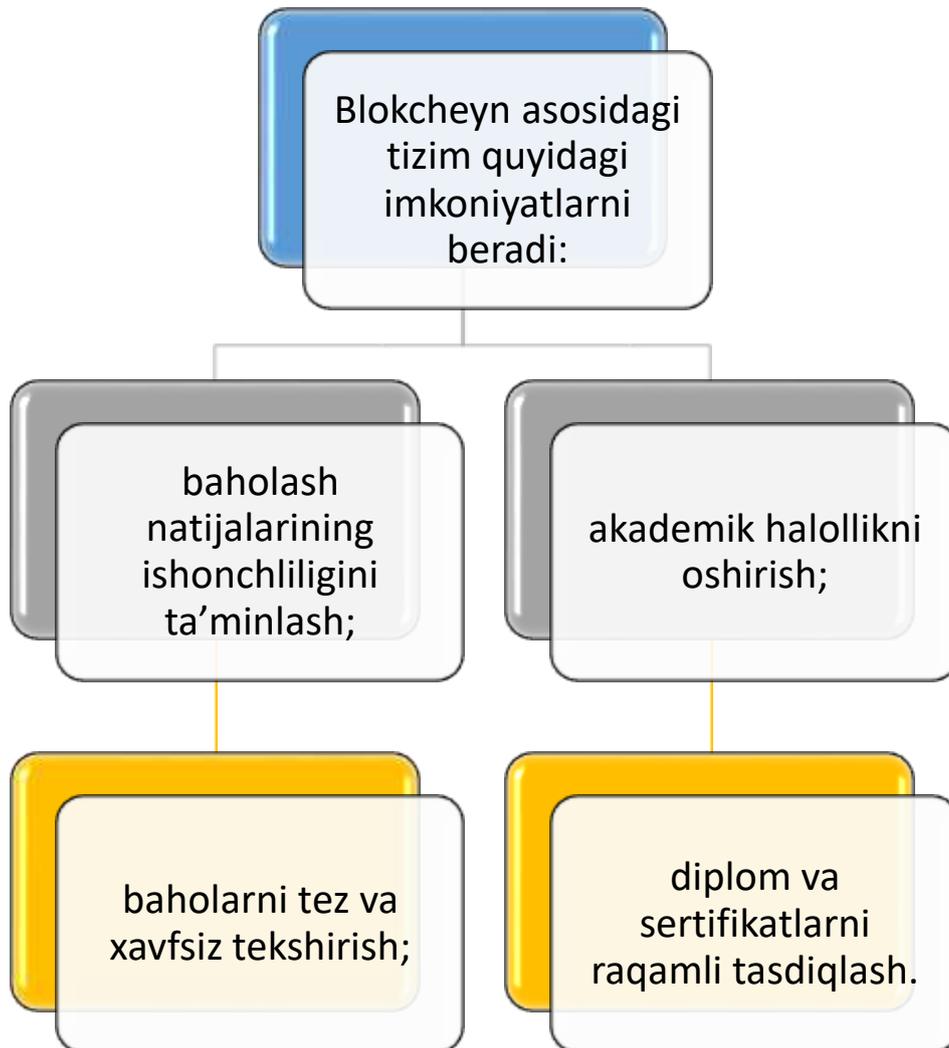
ma'lumotlarning yo'qolishi yoki ruxsatsiz o'zgartirilishi;

baholash jarayonining yetarli darajada shaffof emasligi. Ushbu kamchiliklar ta'lim sifatiga va akademik halollikka salbiy ta'sir ko'rsatadi.

Blokcheyn asosida baholash tizimini yaratish

Blokcheyn texnologiyasi asosida baholash tizimi yaratishda baho natijalari har bir talaba uchun alohida blok sifatida qayd etiladi. Ushbu ma'lumotlar tarmoq ishtirokchilari tomonidan tasdiqlanadi va o'zgartirib bo'lmaydigan holatda saqlanadi.

Natijada baholash jarayoni shaffoflashadi, talaba va o'qituvchi o'rtasida ishonch mustahkamlanadi.



Xulosa qilib aytganda, zamonaviy ta'lim tizimida baholash natijalarining ishonchligi va shaffofligini ta'minlash muhim strategik vazifalardan biri hisoblanadi. Baholash jarayonida yuzaga keladigan noxolislik, inson omiliga ortiqcha bog'liqlik hamda ma'lumotlarning soxtalashtirilishi kabi muammolar ta'lim sifatiga jiddiy salbiy ta'sir ko'rsatadi. Shu sababli innovatsion texnologiyalar asosida yangi, ishonchli baholash tizimlarini joriy etish zarurati ortib bormoqda.

Blokcheyn texnologiyasi o'zining o'zgarmas ma'lumotlar tuzilmasi, markazlashmagan boshqaruv tamoyili va yuqori darajadagi axborot xavfsizligi bilan ta'lim sohasida keng imkoniyatlar yaratadi. Ushbu texnologiya asosida yaratilgan baholash tizimi baho natijalarining haqqoniyligini kafolatlaydi, akademik halollikni mustahkamlaydi hamda ta'lim jarayoniga bo'lgan ishonchni oshiradi. Talabalar, o'qituvchilar va ta'lim muassasalari o'rtasidagi o'zaro munosabatlar yanada shaffof va adolatli tus oladi.

Bundan tashqari, blokcheyn texnologiyasini joriy etish orqali baholash natijalarini tezkor tekshirish, diplom va sertifikatlarni ishonchli tasdiqlash, xalqaro miqyosda tan olinadigan raqamli ta'lim hujjatlarini yaratish imkoniyati paydo bo'ladi. Bu esa ta'lim tizimining global integratsiyasiga xizmat qiladi.

Kelgusida blokcheyn asosidagi baholash tizimlarini ishlab chiqish va amaliyotga tatbiq etish ta'lim jarayonini yanada takomillashtirish, raqamli ta'lim muhitini rivojlantirish hamda yuqori malakali, raqobatbardosh kadrlar tayyorlashda muhim ahamiyat kasb etadi.

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