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CONTACTS

Phone: **+998 50 737 87 88**

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CONTENTS

MECHANISMS FOR FORMING AND IMPLEMENTING INVESTMENT POLICY OF COMMERCIAL BANKS... 8 Abduvaliyev Sanjar Abdurahmanovich	8
EVALUATION OF MANAGEMENT EFFICIENCY BASED ON BUDGETING IN ENERGY ENTERPRISES (A FACTOR ANALYSIS CASE OF "HUDUDGAZTA'MINOT" JSC)..... 17 Sobirov Shoyadbek Kurbonaliyevich	17
PORTFOLIO OF POSTAL SERVICES AND THE ECONOMIC EFFICIENCY OF ITS DIGITALIZATION23 Mamatkulov Gulom Rustamovich	23
OPTIMIZING THE BALANCE BETWEEN LIQUIDITY AND CREDIT RISKS IN ENSURING BANKING STABILITY 30 Anvarov Asliddin Nabijon ugli	30
ECONOMIC EFFICIENCY OF RENEWABLE ENERGY DEPLOYMENT IN UZBEKISTAN.....34 Hamroyeva Sabina Ismoil qizi, Dilshod Anvarjonovich Ismailov	34
MODERN TRENDS AND EFFICIENCY OF LENDING TO AGRICULTURAL PRODUCERS IN UZBEKISTAN..39 Shamshetova Gulraushan Sarsenovna	39
ANALYSIS OF THE RELATIONSHIP BETWEEN YOUTH EMPLOYMENT AND CRIME (CASE OF UZBEKISTAN) 42 Khusniddinova Gulnoza	42
PRIORITY DIRECTIONS FOR IMPROVING THE INFRASTRUCTURE OF UZBEKISTAN'S FINANCIAL SYSTEM 47 Qobilova Nodira Qayumjon qizi, Normurodov Kh.E.	47
FOREIGN EXPERIENCE OF INCREASING THE EXPORT CAPACITY OF THE REGION AND SPECIFIC FEATURES OF ITS APPLICATION IN UZBEKISTAN 52 Mamadzhanova Tuygunoy Akhmadzhanovna	52
INSTITUTIONAL APPROACH TO WASTE MANAGEMENT AND ITS ECONOMIC EFFICIENCY 56 Otbosarov Abrorbek Adhamjon o'g'li	56
LOSS MANAGEMENT MATRIX (LOSS MANAGEMENT MATRIX) MODEL IN POWER GRID ENTERPRISES.. 61 Khojimurodov Zukhriddin Shukurullo oglu	61
MICROPROJECTS AS A MEANS OF INCREASING THE FINANCIAL ACTIVITY AND LITERACY OF THE POPULATION 67 Irgashev Anvar Farxodovich	67
INSTITUTIONAL VA TEXNOLOGIK O'ZGARISHLAR SHAROITIDA INNOVATION BANK XIZMATLARINI JORIY ETISH METODOLOGIYASINI TAKOMILLASHTIRISH..... 74 Azlarova Aziza Axrorovna	74
PROBLEMS OF FORMATION AND DEVELOPMENT OF REGIONAL CLUSTERS IN THE LIGHT INDUSTRY OF UZBEKISTAN 80 Umarkulov Kodirjon Maxamadaminovich	80
DIGITAL FINANCIAL INCLUSION AS A DRIVER OF SUSTAINABLE DEVELOPMENT: EVIDENCE FROM GLOBAL TRENDS AND IMPLICATIONS FOR EMERGING ECONOMIES..... 84 Sabitov Oybek Abduganievich, Sattoriy Fayzullokh Abdijabbor ugli	84
PROPERTIES OF HEAVY CONCRETE DISPERSEDLY REINFORCED WITH NON-METALLIC FIBERS AND SPECIFIC FEATURES OF CALCULATING CONCRETE STRUCTURES BASED ON THEM 90 Usmonova Durdona, Gulomova Dilnura	90
THE EFFECT OF STABLE AND DYNAMIC PRICING ON CONSUMER BEHAVIOR 98 Anvar DEBERDIYEV	98
ECONOMIC MECHANISMS FOR IMPROVING PRODUCTION EFFICIENCY IN INDUSTRIAL ENTERPRISES.. 102 M.O. Yo'ldoshova	102

PEDAGOGICAL EFFECTIVENESS OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN TEACHING
POLITICAL SCIENCE AT HIGHER EDUCATION INSTITUTIONS 106
Rasulev Bobirjon Atkhamovich

CONTENTS

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Rasulev Bobirjon Atkhamovich

Teacher at Tashkent State Medical University,

Independent Researcher at Chirchik State Pedagogical University

Abstract. This article examines the pedagogical effectiveness of using artificial intelligence technologies in teaching political science at higher education institutions. The study is based on recent international guidelines and emerging discipline-specific evidence. UNESCO's guidance on generative AI in education emphasizes human-centered use, privacy protection, and pedagogically grounded integration, while OECD materials argue that AI should be treated both as a tool for learning and as a subject of learning. Research conducted in political science and international relations classrooms demonstrates that AI can support conceptual clarification, formative writing assistance, simulation-based learning, and student engagement. However, it also raises serious concerns regarding academic integrity, over-reliance, source criticism, and the weakening of independent analytical reasoning. The article argues that pedagogical effectiveness is determined not by the mere presence of AI, but by the quality of instructional design, assessment architecture, teacher mediation, and students' critical AI literacy. On this basis, the article proposes key methodological directions for the effective and responsible integration of AI into political science teaching in higher education.

Keywords: political science, artificial intelligence, generative AI, higher education, pedagogy, academic integrity, critical thinking, digital literacy, assessment, political analysis.

Annotatsiya. Mazkur maqolada oliy ta'lim muassasalarida siyosatshunoslik fanini o'qitishda sun'iy intellekt texnologiyalaridan foydalanishning pedagogik samaradorligi tahlil qilinadi. Tadqiqot so'nggi xalqaro tavsiyalar hamda fan yo'nalishiga oid zamonaviy ilmiy dalillarga asoslanadi. UNESCOning ta'limda generativ sun'iy intellektidan foydalanish bo'yicha tavsiyalarida inson omiliga yo'naltirilgan yondashuv, shaxsiy ma'lumotlarni himoya qilish va pedagogik asoslangan integratsiya muhimligi ta'kidlanadi. OECD materiallarida esa sun'iy intellekt ham ta'lim vositasi, ham o'rganish obyekti sifatida qaralishi lozimligi qayd etiladi. Siyosatshunoslik va xalqaro munosabatlar yo'nalishidagi tadqiqotlar sun'iy intellekt tushunchalarni izohlash, yozma ishlarda formatif yordam ko'rsatish, simulyatsion ta'lim hamda talabalar faolligini oshirishda samarali ekanligini ko'rsatadi. Shu bilan birga, akademik halollik, sun'iy intellektga haddan tashqari bog'lanib qolish, manbalarni tanqidiy baholash va mustaqil tahliliy fikrlashning susayishi bilan bog'liq muammolar ham mavjud. Maqolada pedagogik samaradorlik sun'iy intellektning mavjudligi bilan emas, balki o'quv jarayoni dizayni, baholash tizimi, o'qituvchi moderatsiyasi hamda talabalarning tanqidiy AI savodxonligi bilan belgilanishi asoslab beriladi. Shu asosda oliy ta'limda siyosatshunoslikni o'qitishda sun'iy intellektni samarali va mas'uliyatli integratsiya qilishning metodik yo'nalishlari taklif etiladi.

Kalit so'zlar: siyosatshunoslik, sun'iy intellekt, generativ sun'iy intellekt, oliy ta'lim, pedagogika, akademik halollik, tanqidiy fikrlash, raqamli savodxonlik, baholash, siyosiy tahlil.

Аннотация. В данной статье рассматривается педагогическая эффективность использования технологий искусственного интеллекта при преподавании политологии в высших учебных заведениях. Исследование основано на современных международных рекомендациях и новых научных данных в данной предметной области. Рекомендации UNESCO по применению генеративного искусственного интеллекта в образовании подчеркивают важность человекоориентированного подхода, защиты конфиденциальности и педагогически обоснованной интеграции. Материалы OECD указывают на необходимость рассматривать искусственный интеллект одновременно как средство обучения и как объект изучения. Исследования в области политологии и международных отношений показывают, что искусственный интеллект способствует разъяснению концепций, формативной поддержке письменных работ, симуляционному обучению и повышению вовлеченности студентов. Вместе с тем возникают серьезные вопросы, связанные с академической добросовестностью, чрезмерной зависимостью от ИИ, критической оценкой источников и ослаблением самостоятельного аналитического мышления. В

статье обосновывается, что педагогическая эффективность определяется не самим наличием ИИ, а качеством учебного дизайна, системы оценивания, педагогической модерации и уровнем критической AI-грамотности студентов. На этой основе предлагаются основные методологические направления эффективной и ответственной интеграции ИИ в преподавание политологии в системе высшего образования.

Ключевые слова: политология, искусственный интеллект, генеративный искусственный интеллект, высшее образование, педагогика, академическая добросовестность, критическое мышление, цифровая грамотность, оценивание, политический анализ.

INTRODUCTION

Artificial intelligence has rapidly become an integral part of higher education practice. Instructors and students increasingly use AI tools to explain concepts, draft texts, generate questions, summarize readings, and organize learning activities. UNESCO notes that generative AI is advancing more rapidly than many national regulatory and institutional frameworks, leaving education systems insufficiently prepared in areas such as privacy protection, validation, and pedagogical governance. Similarly, the OECD frames AI as a major educational issue that affects not only classroom practice but also skills development, curriculum priorities, and the broader purposes of education [1], [2].

In political science, this issue is particularly significant. The teaching of political science is not limited to the transmission of factual information; rather, it requires students to interpret institutions, compare theories, evaluate evidence, construct arguments, and critically analyze political discourse. Therefore, AI may either support higher-order learning or undermine it, depending on the manner in which it is used. Recent studies in political science education demonstrate that AI is already influencing teaching practices, academic writing, and assessment processes, and that the discipline must respond not only through restrictions, but also through pedagogical redesign and methodological adaptation [3], [4], [5].

The purpose of this article is to analyze the pedagogical effectiveness of AI technologies in teaching political science in higher education institutions and to identify the conditions under which their use becomes educationally productive rather than academically corrosive.

LITERATURE REVIEW

The literature on artificial intelligence in education can be grouped into three broad strands. The first strand concerns general pedagogical and ethical principles. UNESCO's guidance proposes a human-centered approach to generative AI in education and research, emphasizing privacy protection, regulation, and the need to align AI use with educational objectives rather than with technological novelty alone. Similarly, the OECD's 2025 framework argues that AI should be considered both a learning tool and a learning object, meaning that students should not only use AI productively but also understand its social, political, and institutional implications [1], [2].

The second strand focuses specifically on political science education. Wu and Wu, drawing on two surveys conducted through the American Political Science Association, found that political science instructors were generally more negative than positive regarding the overall effects of generative AI, although they acknowledged its limited usefulness in tasks such as copyediting and formatting. Their study also demonstrated that respondents were able to distinguish AI-generated text from student-written text with only approximately 45% to 53% accuracy. This finding suggests that conventional detection strategies are insufficient and that assessment design requires substantial reconsideration [3].

The third strand examines classroom experimentation and the cognitive effects of AI use. Rivetti and colleagues describe an eight-week laboratory conducted in international relations classrooms at Dublin City University between October and December 2023, demonstrating that ChatGPT can create educational value in structured pedagogical settings while also requiring careful management of its limitations. A more recent 2026 study on political science in higher education reports that greater AI usage intensity was associated with higher perceived learning gains but lower levels of critical-thinking independence. This finding suggests that AI may function as a useful cognitive scaffold when used moderately, but may become a substitute for independent reasoning when overused. In addition, a 2026 article entitled *Teaching Political Science in the Age of AI* argues that political science is uniquely positioned not only to utilize AI, but also to critically examine its implications. The study highlights reflective assignments, simulations, and student-led evaluation activities as promising pedagogical responses [4], [5], [6].

RESEARCH METHODOLOGY

This study employed a qualitative research approach based on comparative and content analysis methods. The research analyzed UNESCO and OECD policy documents, as well as recent scholarly studies on the use of artificial intelligence in political science and higher education. Particular attention was given to pedagogical effectiveness, academic integrity, critical thinking, and assessment practices. The collected materials were systematically examined to identify the main opportunities, challenges, and methodological directions for the effective integration of AI technologies into political science teaching.

ANALYSIS AND RESULTS

1. Pedagogical Opportunities

The first major opportunity lies in conceptual support. Political science students frequently struggle with abstract concepts such as legitimacy, sovereignty, representation, ideology, constitutionalism, and realism. AI tools can explain these concepts at different levels of complexity, compare intellectual traditions, and provide immediate follow-up clarification. When used carefully, such tools can reduce entry barriers for students and allow classroom time to be devoted to deeper analytical discussion. UNESCO explicitly recognizes the pedagogical potential of generative AI in curriculum design, teaching, and learning when its integration is grounded in sound educational principles [1].

The second opportunity concerns support for preparatory academic work. Political science education relies heavily on essays, briefing notes, discussion papers, and structured argumentation. AI can assist students in brainstorming ideas, organizing paper structures, improving clarity, and revising grammar. Evidence presented by Wu and Wu suggests that instructors are generally more comfortable with the use of AI for auxiliary tasks such as editing and formatting than for the core production of political analysis. From a pedagogical perspective, this distinction appears both reasonable and academically justified [3].

The third opportunity relates to simulation- and scenario-based learning. Political science and international relations frequently employ role-playing exercises, negotiations, policy simulations, and comparative scenarios. Rivetti and colleagues demonstrate that AI can be integrated into structured classroom experimentation to enrich discussion and critical reflection. In higher education settings, this may support more interactive forms of teaching by enabling students to test alternative policy responses, compare ideological perspectives, and simulate political actors in diplomatic or institutional contexts [4], [6].

The fourth opportunity is the development of AI literacy as a form of disciplinary learning. Political science is particularly well suited to teaching students how AI influences public administration, surveillance systems, political campaigns, misinformation, democratic accountability, and public policy design. The OECD's argument that AI should also be understood as a "subject of learning" is especially relevant in this context. Consequently, the integration of AI into political science teaching may itself strengthen civic awareness and analytical competence [2].

2. Pedagogical Challenges

The first major challenge concerns academic integrity. Political science assignments are often intended to demonstrate students' independent reasoning, interpretation, and argumentative structure. If AI systems generate plausible essays or analytical passages, it may become difficult to determine whether students genuinely understand the material. Wu and Wu's finding that instructors were only marginally successful in distinguishing AI-generated text from student-written work clearly demonstrates that this challenge cannot be resolved through detection strategies alone [3].

The second challenge is the potential weakening of independent critical thinking. The 2026 study on political science in higher education reports a threshold-like effect: higher levels of AI use were associated with greater perceived learning gains but lower levels of independence in critical thinking. This finding represents a significant concern for political science education, where the central objective is not merely the production of text, but the development of judgment, evidence evaluation, and argumentative autonomy [5].

The third challenge relates to source criticism and factual reliability. AI systems may produce fabricated citations, oversimplified summaries, or politically biased interpretations. In political science, such shortcomings are particularly problematic because the discipline depends heavily on contextual interpretation and source credibility. UNESCO warns that regulatory adaptation has not kept pace with the rapid development of generative AI, leaving validation procedures and privacy protections insufficiently developed in many educational contexts [1].

The fourth challenge concerns assessment validity. If students are able to use AI systems to complete take-home essays or short analytical assignments, many traditional assessment formats may no longer function as reliable indicators of learning outcomes. As a result, political science programs face increasing pressure to

redesign assessment practices toward oral defense, in-class analytical work, iterative drafting, source-based assignments, and process-oriented evaluation methods. The findings of Wu and Wu strongly support this conclusion [3], [6] (Table 1).

Table 1
Main Pedagogical Opportunities and Challenges[□]

Dimension	Opportunities	Challenges
Concept learning	Faster explanation and differentiated support	Risk of passive dependence
Writing support	Improved structure, revision, and preparation	Threats to originality and authorship
Classroom interaction	Richer simulations and debates	Superficial or formulaic responses
Critical thinking	Can scaffold inquiry when used moderately	Overuse may reduce independent reasoning
Assessment	Encourages innovation in evaluation methods	Weakens the validity of traditional take-home tasks

Methodological Directions for Improving Pedagogical Effectiveness

The first direction is controlled integration rather than total prohibition. AI should neither be completely banned nor adopted without limitations. Higher education institutions should clearly define where AI use is permitted, where it is restricted, and how its use must be disclosed. This approach is consistent with UNESCO's human-centered guidance and the OECD's emphasis on system-level adoption strategies [1], [2].

The second direction concerns assessment redesign. In political science education, the most effective response is to evaluate not only final written products but also the reasoning processes underlying them. Topic proposals, source maps, annotated bibliographies, argument outlines, in-class writing, oral defense, and iterative drafts can make students' thinking more visible and reduce inappropriate dependence on AI systems [3], [4].

The third direction is the development of explicit critical AI literacy. Students should be taught how to critically evaluate AI-generated outputs, verify references, identify bias, and understand the political implications of algorithmic systems. This is particularly important in political science, where AI itself is increasingly becoming part of the subject matter [2].

The fourth direction concerns faculty development. Teachers require professional training in prompt design, verification strategies, ethical policy, and AI-aware pedagogy. Without adequate teacher preparedness, AI may increase convenience while simultaneously reducing educational depth. Recent scholarship in political science education argues for a transition from reactive control strategies toward proactive pedagogical design [4], [6].

CONCLUSIONS AND RECOMMENDATIONS

The pedagogical effectiveness of using artificial intelligence technologies in teaching political science in higher education institutions is conditional rather than automatic. AI can enhance learning by supporting conceptual explanation, academic writing preparation, simulation-based activities, and the development of digital literacy. At the same time, it may undermine academic integrity, weaken independent critical thinking, and challenge the validity of conventional assessment practices. The most reliable evidence from recent international guidance and political science education research suggests that educational effectiveness depends primarily on instructional design, teacher mediation, and the preservation of human judgment at the center of the learning process.

For this reason, the most appropriate approach is neither unrestricted AI use nor blanket prohibition, but rather a transparent, critically guided, and pedagogically purposeful integration of AI into political science teaching. When implemented in this manner, AI can support educational development without replacing the central objectives of the discipline, namely critical reasoning, evidence-based argumentation, reflective judgment, and informed citizenship.

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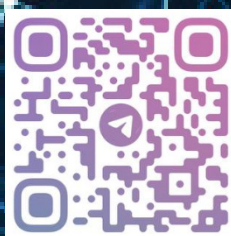
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