USING ARTIFICIAL INTELLIGENCE IN TEACHING POLITICAL SCIENCE: INNOVATIVE APPROACHES AND PEDAGOGICAL OPPORTUNITIES

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Abstract

This article examines innovative approaches and pedagogical opportunities associated with using artificial intelligence in teaching political science. In higher education, AI is increasingly used to explain concepts, support writing, structure discussion, generate scenarios, and personalize learning. At the same time, it raises serious questions about academic integrity, source reliability, assessment validity, and students' independent analytical reasoning. International guidance from UNESCO emphasizes human-centered, pedagogically grounded, and ethically governed use of generative AI, while OECD work suggests that AI should be approached both as a tool for learning and as a subject of learning. Recent work in political science education shows that AI can enrich concept learning, simulations, and formative support, but that its pedagogical effectiveness depends heavily on instructional design, assessment architecture, and teacher mediation. On this basis, the article argues that AI can be pedagogically effective in political science only when it is integrated deliberately, transparently, and critically rather than used as an unregulated shortcut.

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

Introduction

Artificial intelligence has rapidly become part of higher education teaching and learning. Tools based on large language models are now used for explaining ideas, summarizing texts, drafting responses, generating questions, and assisting with course design. UNESCO's guidance on generative AI in education and research frames this development as both promising and risky, stressing that AI adoption in education must remain human-centered, pedagogically justified, and sensitive to privacy, equity, and governance concerns. [1]

In higher education, the issue is not simply whether AI is available, but whether it improves teaching and learning in meaningful ways. A 2025 national consultation commissioned by Ireland's Higher Education Authority described generative AI as not merely a technological issue but also a pedagogical, ethical, and strategic one. The same report highlighted the urgent need for coordinated guidance, curriculum and assessment redesign, staff capacity-building, and transparent governance if higher education institutions are to respond constructively.

Political science is a particularly important field in this debate. The discipline requires students not only to know facts, but also to interpret institutions, compare theories, analyze arguments, evaluate evidence, and engage critically with political texts and claims. That means AI can function either as a scaffold for learning or as a substitute for thinking, depending on how it is used. Recent political science education research shows that AI has already begun to reshape expectations around writing, assessment, and classroom interaction.

The purpose of this article is to analyze innovative approaches and pedagogical opportunities in the use of AI for teaching political science, while also identifying the conditions under which its use becomes educationally effective rather than pedagogically harmful. [1], [2], [3], [4], [5], [7]

Literature Review

The broader educational literature increasingly treats AI as a structural development rather than a temporary novelty. UNESCO's guidance proposes a human-centered framework for generative AI in education, emphasizing privacy, regulation, learner protection, and pedagogically appropriate use. OECD's 2025 work complements this view by arguing that education systems should treat AI both as a learning tool and as a learning object, so that students not only use AI productively but also understand its social and institutional implications. [1], [2]

In higher education specifically, the 2025 HEA consultation found that institutions were already facing major questions about authorship, assessment, academic integrity, inclusion, and staff readiness. The report stressed that the sector lacked sufficiently coordinated national guidance and that values-based practice frameworks, programme-level curriculum and assessment redesign, investment in staff capacity, and stronger governance structures were needed to manage adoption transparently and ethically. [3]

Within political science, Wu and Wu's 2024 study based on two APSA surveys is especially important. It found that political science instructors tended to view the overall impact of generative AI somewhat negatively, although they were more open to narrow uses such as copyediting and formatting. Their study also found that respondents distinguished bot-written text from student-written text only with roughly 45% to 53% accuracy, suggesting that conventional detection strategies are weak and that pedagogical redesign is more realistic than enforcement alone. [4]

Classroom experimentation offers a more practice-oriented perspective. Rivetti, Banerjee, and O'Mullane describe an eight-week laboratory in international relations classrooms at Dublin City University conducted between October and December 2023. Their study showed that ChatGPT could support reflection and experimentation in teaching, but also made clear that assessment methods and learning goals need revision in environments where generative AI is regularly available. [5]

Further reflection within the discipline also points toward long-term pedagogical adaptation. Michels argues that AI should not be understood only as a threat to academic honesty, but also as a tool that can augment teaching and allow instructors to focus on higher-level learning outcomes when used intentionally. De Maio similarly argues that political science is uniquely positioned both to use AI and to critically interrogate it, and recommends reflective assignments, simulation-based learning, and student-led evaluations as practical teaching strategies. [6], [7]

Analysis and Discussion

1. AI as a tool for conceptual clarification and differentiated support

One major pedagogical opportunity is conceptual support. Political science students often struggle with abstract ideas such as sovereignty, legitimacy, representation, constitutionalism, liberalism, realism, or democratic accountability. AI tools can provide multiple explanations of the same concept, vary difficulty levels, compare theoretical traditions, and answer follow-up questions instantly. In this way, AI can help students overcome initial barriers to understanding and allow classroom time to be used more productively for discussion and interpretation. UNESCO's guidance supports this kind of pedagogically grounded use when teacher oversight remains central. [1]

A related opportunity is differentiated support for diverse learners. Because AI can adapt explanations, generate examples, and respond interactively, it may help students with different levels of preparation engage more confidently with political science materials. OECD's work on AI in education suggests that one major benefit of AI is its potential to support more personalized learning environments, provided that system design remains aligned with educational goals rather than technological convenience alone. [2]

2. AI for formative writing support and academic preparation

Political science teaching relies heavily on essays, position papers, literature responses, policy briefs, and analytical writing. In that context, AI can be useful in the preparatory stages of writing: brainstorming, outlining, clarifying structure, improving readability, and revising grammar. Wu and Wu's study suggests that political science instructors are more comfortable with these limited uses than with the generation of full analytical responses, which indicates an emerging distinction between AI as a writing aid and AI as a substitute author. [4]

This distinction is pedagogically important. If AI is used to support planning and revision, it may reduce low-level barriers and let students focus more on substance. Michels argues that AI can augment teaching and learning when instructors use it intentionally to shift attention toward higher-order outcomes instead of routine tasks. In this sense, AI can improve the efficiency of academic preparation without displacing the core intellectual work of political science. [6]

3. AI for active learning, simulation, and scenario-based teaching

Another major opportunity lies in active learning. Political science and international relations classes often use debate, role-play, crisis simulation, policy comparison, and institutional scenario analysis. Rivetti and colleagues show that AI can enrich these forms of teaching by helping students generate alternative scenarios, compare policy responses, or test positions adopted by different actors. Their classroom experiment suggests that AI becomes especially valuable when it is used to stimulate structured reflection rather than to deliver final answers. [5]

De Maio develops this line of thought further by suggesting reflective assignments, simulations, and student-led evaluation as practical strategies for AI use in political science. This is particularly promising because the discipline lends itself well to role-based and scenario-based learning. AI can help students simulate legislative bargaining, diplomatic negotiations, constitutional disputes, or campaign

communication, thereby making abstract political processes more concrete and discussable. [7]

4. AI literacy as a disciplinary learning outcome

A further pedagogical opportunity is that AI itself can become part of political science learning. OECD's argument that AI should be treated as a subject of learning is particularly relevant here. Political science students need to understand how AI affects governance, surveillance, administrative decision-making, misinformation, electoral politics, public accountability, and democratic norms. Integrating AI into the curriculum can therefore strengthen not only technical awareness but also civic and analytical literacy. [2]

This is one of political science's distinctive strengths in the AI era. Unlike some disciplines where AI is mainly a utility tool, political science can simultaneously use AI in teaching and critically examine its political consequences. De Maio explicitly argues that the field is well placed to both utilize and interrogate AI, which gives AI-related pedagogy a double educational value in this discipline. [7]

5. Core pedagogical challenges

Despite these opportunities, the challenges are substantial. The first is academic integrity. Political science writing is designed to reveal how students argue, interpret, compare, and justify claims. If AI generates plausible prose and ready-made argumentative structures, it may conceal the absence of genuine understanding. Wu and Wu's evidence that instructors could barely distinguish AI-generated from student-written text shows that detection-based control is unreliable as a pedagogical strategy. [4]

The second challenge is the weakening of independent reasoning. When students rely too heavily on AI for interpretation and structure, they may stop practicing the slow intellectual work required for political analysis. De Maio warns that AI can encourage superficial thinking even while it expands access and scaffolds learning.

This makes the pedagogical question one of dosage and design: AI may support learning at moderate levels of guided use, but undermine it when it replaces cognitive effort. [7]

The third challenge is source reliability and disciplinary rigor. Political science depends on careful reading, contextual interpretation, and credible citation. AI systems can fabricate references, misrepresent arguments, or flatten political nuance. UNESCO's guidance is especially relevant here because it highlights the fact that educational systems are still adapting to the risks of generative AI, including truthfulness, validity, and governance. In political science, these weaknesses directly threaten core disciplinary standards. [1]

The fourth challenge is assessment validity. If students can use AI to generate or heavily shape take-home essays, short responses, or discussion posts, then many traditional forms of assessment become less reliable indicators of learning. The HEA consultation and the APSA survey evidence both suggest that institutions and instructors need assessment redesign rather than mere prohibition. [3], [4]

Table 1.

Main pedagogical opportunities and challenges

Dimension	Opportunities	Challenges
Concept learning	Faster explanation and differentiated support	Risk of passive dependence
Writing	Better brainstorming, structure, and revision	Threat to authorship and originality
Active learning	Richer simulations, debates, and scenarios	Superficial or formulaic outputs
Disciplinary learning	Stronger AI literacy within political science	Requires explicit critical framing
Assessment	Encourages innovative, process-based evaluation	Weakens validity of conventional take-home tasks

Source: developed by the author on the basis of [1]–[7].

Methodological Directions for Effective Use

The first direction is intentional integration instead of unregulated adoption. AI should not simply be allowed everywhere, nor banned entirely. Higher education institutions need clear policies specifying where AI use is acceptable, where it is restricted, and how it must be disclosed. The HEA report is especially useful here because it argues for values-based practice frameworks, transparent governance, and system-level coherence rather than fragmented institutional improvisation.

The second direction is assessment redesign. Political science instructors should assess not only the final product but also the reasoning process that leads to it. Topic proposals, annotated source maps, argument outlines, iterative drafts, in-class analytical writing, oral defense, and reflective commentary can all make learning more visible and reduce inappropriate reliance on AI. Wu and Wu's findings strongly support this shift.

The third direction is explicit critical AI literacy. Students should be taught how to evaluate AI output, identify fabrication, verify sources, detect bias, and understand the political implications of algorithmic systems. OECD's framing of AI as both a learning tool and a learning object supports embedding this literacy directly into the curriculum rather than treating it as an optional add-on.

The fourth direction is faculty development. Teachers need support in prompt design, verification practices, AI-aware assessment, and pedagogical framing. The HEA consultation repeatedly emphasizes staff capacity-building, while Michels and De Maio both argue for moving beyond reactive control toward purposeful instructional design. Without teacher preparedness, AI is likely to increase convenience without improving learning quality. [3], [6], [7]

Conclusion

The pedagogical effectiveness of using artificial intelligence technologies in teaching political science in higher education institutions is real but conditional. AI can improve teaching by supporting concept explanation, formative writing, simulation, and AI literacy. At the same time, it can undermine academic integrity, weaken independent reasoning, distort source use, and destabilize traditional assessment. The strongest conclusion from recent guidance and political science education research is that effectiveness depends not on the technology alone but on the educational design surrounding it.

Accordingly, the most appropriate approach is neither unrestricted use nor blanket prohibition. AI should be integrated transparently, critically, and purposefully, with human judgment and disciplinary standards kept at the center. When used in that way, AI can become not a substitute for political thinking, but a structured support for deeper engagement with political science as an academic and civic field.

References

1. UNESCO. Guidance for Generative AI in Education and Research. 2023.
2. OECD. AI Adoption in the Education System. 2025.
3. Higher Education Authority. Generative AI in Higher Education Teaching and Learning: Sectoral Perspectives. 2025.
4. Wu, N., & Wu, P. Y. Surveying the Impact of Generative Artificial Intelligence on Political Science Education. PS: Political Science & Politics, 2024.
5. Rivetti, P., Banerjee, R., & O'Mullane, D. Testing in International Relations Classrooms: Potentialities, Limitations, and What's Next. PS: Political Science & Politics, 2025.
6. Michels, S. Teaching (with) Artificial Intelligence: The Next Twenty Years. Journal of Political Science Education, 2023.
7. De Maio, J. Teaching Political Science in the Age of AI. 2026.