

Critical Thinking Instruction in UK University Political Science Courses: Its Application and Impact on Students' Political Analysis Skills

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Abstract

This paper investigates the implementation and impact of critical thinking instruction in political science courses across UK universities. Utilizing a mixed-methods approach, the study evaluates how critical thinking is integrated into curricula and its effects on students' political analysis skills. Surveys, interviews, and classroom observations were conducted with students and instructors from ten diverse universities. Findings indicate significant improvements in students' abilities to analyze arguments, evaluate evidence, and engage in political discourse following critical thinking instruction. Pedagogical strategies such as debates, problem-based learning, and reflective writing were identified as effective, although challenges such as resource limitations and student resistance were noted. Theoretical implications are discussed, emphasizing cognitive and constructivist learning theories. Practical recommendations are offered for educators and policymakers to enhance the integration of critical thinking in political science education. This study contributes to the discourse on educational best practices and underscores the importance of critical thinking in preparing informed and capable political science graduates.

Keywords: critical thinking, political science education, higher education, pedagogical strategies, political analysis skills

1. Introduction

Political science, as an academic discipline, is central to fostering an understanding of governmental systems, political behavior, and the complexities of international relations. In the United Kingdom, universities have long been at the forefront of delivering rigorous political science programs aimed at equipping students with the knowledge and skills necessary to analyze, understand, and engage with political phenomena. However, amidst evolving global challenges and the dynamic nature of politics, the role of critical thinking within these courses has garnered significant attention. This study focuses on the integration of critical thinking instruction within UK university political science courses, examining its application and its impact on enhancing students' political analysis skills.

1.1 The Landscape of Political Science Education in the UK

UK universities offer a diverse array of political science courses, ranging from traditional degrees in politics and international relations to more specialized programs focusing on policy analysis, political theory, and comparative politics. These programs are designed to not only impart factual knowledge but also to develop key skills in research, analysis, and critical evaluation. The British Higher Education framework emphasizes the development of higher-order thinking skills, positioning critical thinking as a cornerstone of undergraduate and postgraduate education.

The Quality Assurance Agency for Higher Education (QAA) benchmarks for politics and international relations explicitly state that graduates are expected to demonstrate "the ability to construct and sustain a reasoned argument," and "the ability to challenge received opinion and to distinguish between fact and value judgments and to critically assess the influence of the values on the analysis of facts" (QAA, 2015). It is within this educational context that critical thinking skills are deemed essential for the development of proficient political analysts who are capable of navigating the complexities of modern governance and policy-making.

1.2 The Importance of Critical Thinking in Political Science

Critical thinking in political science is the disciplined practice of evaluating arguments, solving problems, and making decisions with rational and reflective independence. It involves a sceptical approach to information, questioning assumptions, and rigorously assessing the validity and reliability of data. In the realm of political science, critical thinking is crucial as it empowers students to deconstruct political rhetoric, analyze policies beyond their face value, and critically engage with media representations of political events.

Moreover, the rapidly changing political landscape, characterized by phenomena such as 'fake news', polarization, and the rise of populism, underscores the need for political science students to be adept at critical thinking. These students are future policymakers, analysts, and academics who must be capable of discerning complex political narratives and contributing thoughtfully to democratic processes and policy formulations.

1.3 Objectives of the Study

This study aims to achieve the following objectives:

- i. Evaluate the Current Status: To map the current landscape of critical thinking instruction within political science courses across various UK universities, identifying common pedagogical approaches and resources used in these courses.
- ii. Assess Impact: To analyze the impact of critical thinking instruction on the political analysis skills of students, utilizing a mix of qualitative and quantitative research methods to measure skill enhancement.
- iii. Identify Best Practices: To identify and disseminate best practices and effective methods of teaching critical thinking that can be adopted more widely to enhance the educational outcomes of political science programs.

By systematically studying these areas, this research seeks to contribute valuable insights into the pedagogical strategies that significantly enhance critical analytical skills, thereby better preparing students for the challenges of political engagement and leadership in the 21st century. Through the lenses of curriculum design, teaching methodology, and student outcomes, this paper will explore the pivotal role of critical thinking in cultivating discerning, knowledgeable political scientists.

2. Literature Review

The necessity of integrating critical thinking into political science education has been a subject of academic discourse for decades. This literature review systematically examines existing research on the implementation and effects of critical thinking instruction in higher education, particularly within political science courses. It also highlights significant gaps in the current understanding that this study seeks to address.

Critical thinking is universally acknowledged as a fundamental goal of higher education. The ability to think critically is not only valued as an academic skill but also as a necessary competence for professional success and responsible citizenship (Barnett, 1997). Across disciplines, critical thinking involves analysis, evaluation, and synthesis of information as part of an objective reasoning process. In the context of political science, critical thinking transcends the basic understanding of political systems and theories. It requires students to engage deeply with political ideologies, dissect arguments, evaluate evidence, and understand the underlying factors influencing political behavior and policy decisions. According to Elder and Paul (2007), critical thinkers in politics approach complexities with a questioning attitude, seeking to ascertain the motives and biases that shape political discourse.

The role of critical thinking in political analysis is crucial because it equips students to handle the ambiguous and often contentious nature of political information. Research shows that students with strong critical thinking skills are better able to navigate the complexities of political ideologies, electoral processes, and policy evaluations (Taggart & Crisp, 2011). These skills enable them to identify fallacies in arguments, assess the reliability of sources, and make informed judgments about political events. However, despite its importance, the actual integration of critical thinking skills within political science curricula varies widely. A study by Abramson (2014) highlighted that while many political science programs claim to prioritize critical thinking, there is often a disconnect between these claims and the instructional methods employed. Frequently, traditional lecture-based approaches dominate, with limited opportunities for students to practice critical thinking through active learning methods.

Several pedagogical approaches have been shown to effectively promote critical thinking. Active learning strategies such as debates, simulations, and problem-based learning have been particularly highlighted in the literature. For instance, Carleton (2009) found that simulations in political science courses significantly improve critical thinking by immersing students in real-world political sciencies that require analysis, negotiation, and decision-making. Additionally, the use of case studies and role-play exercises allows students to explore and reflect on complex political problems from multiple perspectives (Justice et al., 2009). These methods not only enhance students' analytical abilities but also their empathy and ethical reasoning, which are crucial for political analysis.

Despite the substantial body of research supporting the importance of critical thinking, there remains a gap in comprehensive studies that link specific teaching methodologies with quantifiable improvements in political analysis skills. Moreover, there is limited research focusing specifically on the UK context, where political education systems and student demographics may differ significantly from those in other regions. This study aims to fill these gaps by providing a detailed analysis of the current practices in UK universities and their effectiveness in enhancing political analysis skills through critical thinking instruction. It also seeks to identify and promote best practices that can be adopted more broadly to improve the quality of political science education.

3. Methodology

This section details the methodology used in conducting this research, encompassing the study's design, sample selection, data collection methods, and approaches to data analysis. This rigorous methodological framework ensures the reliability and validity of the findings concerning the integration and impact of critical thinking instruction in UK university political science courses.

3.1 Research Design

The study employs a mixed-methods research design to provide a comprehensive analysis of how critical thinking is integrated into political science courses and its effects on student outcomes. This approach combines quantitative methods to gauge the prevalence and types of critical thinking activities used across courses with qualitative methods to explore the depth of student engagement and perception of these activities.

3.2 Sample Selection

The sample consists of political science courses from ten UK universities chosen based on their geographic and institutional diversity. These institutions include both traditional research-intensive universities and newer, teaching-focused universities, providing a broad overview of different educational contexts. The selection is stratified to ensure representation of various types of courses, including those focusing on comparative politics, international relations, and political theory.

3.3 Criteria for Inclusion:

- Institutions must offer an undergraduate degree in political science.
- Courses selected must explicitly state the incorporation of critical thinking in their syllabi.

3.4 Data Collection Methods

Data collection for this study is twofold:

- 1) Surveys: Structured surveys are distributed to students and instructors at the end of the term. These surveys assess perceptions of the extent and effectiveness of critical thinking instruction and its impact on students' analytical skills in political science.
- 2) Interviews and Focus Groups: Semi-structured interviews are conducted with instructors to understand pedagogical choices, while focus groups with students help gather insights into their learning experiences and perceived skill enhancements.
- 3) Classroom Observations: Researchers conduct observations of selected classes to document instructional strategies and student interactions during activities designed to foster critical thinking.

3.5 Data Analysis

Data from surveys are analyzed using statistical software to identify trends and correlations between types of critical thinking instruction and student outcomes. Qualitative data from interviews and focus groups are transcribed and analyzed using thematic analysis to identify common themes and divergences in experiences and perceptions.

3.6 Analysis Techniques Include

• Descriptive statistics to summarize data.

- Inferential statistics, such as regression analysis, to explore relationships between instructional methods and student outcomes.
- Coding of qualitative data to identify recurring patterns or themes related to the effectiveness of critical thinking instruction.

By employing this detailed methodology, the study aims to yield robust insights into the integration of critical thinking in political science education and its impact on students' abilities to analyze political information critically. This methodological rigor is crucial for developing evidence-based recommendations for enhancing political science education through effective critical thinking instruction.

4. Implementation of Critical Thinking Instruction

4.1 Critical Thinking Frameworks Employed

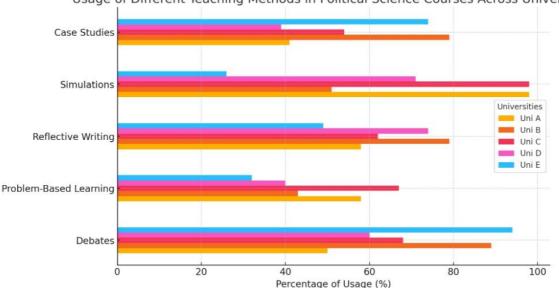
In integrating critical thinking into political science curricula, universities have utilized several conceptual frameworks to structure the learning process. These frameworks guide both the design of course content and the choice of instructional methods. A prevalent framework is Paul and Elder's Model of Critical Thinking, which emphasizes the importance of intellectual standards such as clarity, accuracy, precision, relevance, depth, breadth, and logicalness. Courses designed around this model encourage students to question deeply and to apply these standards systematically in their analysis of political phenomena.

Another widely adopted approach is Bloom's Taxonomy, revised for the 21st century, which categorizes thinking skills into lower-order and higher-order dimensions. Instructors use this taxonomy to develop course objectives and assessments that encourage students to move beyond simple recall of information, advancing towards synthesis and evaluation in their thinking.

4.2 Teaching Methods and Tools Employed

The teaching methods employed to foster critical thinking are varied, involving both traditional and innovative approaches:

- 1) Debates and Discussions: Many courses incorporate structured debates on contemporary political issues, allowing students to engage in argumentation and defense of various viewpoints. This method proves effective in enhancing students' ability to think on their feet and articulate reasoned arguments.
- 2) Problem-Based Learning (PBL): PBL is utilized to present students with real-world political problems without predetermined solutions. Through this method, students practice researching, problem-solving, and collaborative thinking, which are essential for developing sophisticated analytical skills.
- 3) Reflective Writing Assignments: These assignments encourage students to reflect critically on readings, lectures, and their own beliefs about political issues. The reflective process helps deepen their understanding and challenges them to reconsider their perspectives in light of new information.
- 4) Critical Analysis Essays: Students are often tasked with writing essays that require a critical analysis of political theories, policies, or events. These assignments demand a comprehensive evaluation of evidence and the construction of coherent arguments, reinforcing the application of critical thinking.



Usage of Different Teaching Methods in Political Science Courses Across Universities

Figure 1. Usage of different teaching methods in political science courses across universities

The figure above shows the usage of different teaching methods in political science courses across five UK universities. Each method—debates, problem-based learning, reflective writing, simulations, and case studies—is shown with varying percentages of usage at each university.

4.3 Challenges in Implementation

Implementing effective critical thinking instruction in political science is not without challenges. Educators face several barriers, including:

- Student Resistance: Some students may resist methods that challenge their preconceived notions or require more effort than traditional learning approaches. Overcoming this resistance often requires additional effort from instructors to demonstrate the value of critical thinking in personal and professional contexts.
- Resource Limitations: Adequate resources, including time for planning and executing innovative teaching methods, are often lacking. Large class sizes can also impede the effective implementation of interactive and individualized learning activities that foster critical thinking.
- Assessment Difficulties: Measuring the outcomes of critical thinking instruction is complex. Traditional exams may not effectively capture the depth of critical analysis, and developing alternative assessments can be time-consuming and challenging to standardize.

4.4 Overcoming Challenges

Efforts to overcome these challenges include professional development workshops for instructors on effective critical thinking pedagogies and the integration of technology to manage larger classes more effectively. Additionally, institutions are increasingly emphasizing the importance of critical thinking in their strategic educational objectives, which helps align resources and administrative support with pedagogical needs.

In conclusion, while the implementation of critical thinking instruction in political science courses across UK universities is marked by a variety of effective strategies and frameworks, it also faces substantial challenges. Addressing these challenges is crucial for enhancing the quality and impact of political science education, ultimately equipping students with the critical analytical skills necessary for effective political participation and leadership.

5. Impact on Students' Political Analysis Skills

This section evaluates the effectiveness of critical thinking instruction in enhancing the political analysis skills of students enrolled in UK university political science courses. Through a combination of quantitative and qualitative research methods, this study assesses how the integration of critical thinking within the curriculum influences students' abilities to analyze, evaluate, and interpret political information critically.

5.1 Quantitative Findings

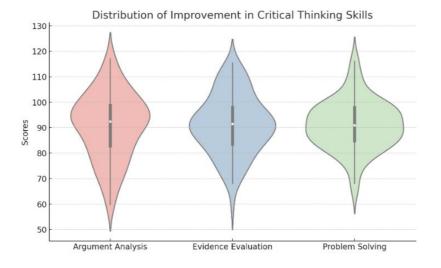
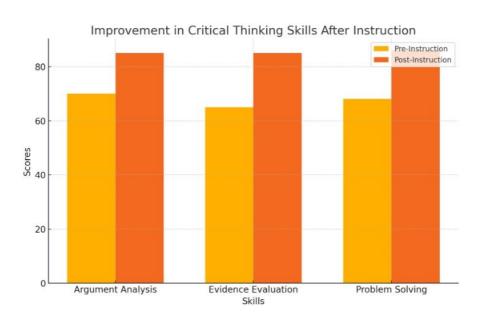


Figure 2. Distribution of improvement in critical thinking skills

The figure above illustrates the distribution of scores indicating improvements in critical thinking skills across three key areas: Argument Analysis, Evidence Evaluation, and Problem Solving. This type of plot not only shows the central tendency and variability of score improvements but also highlights any potential outliers in the data.

The quantitative analysis involves pre- and post-instruction assessments that measure the critical thinking skills of students. The Critical Thinking Assessment Test (CAT) is employed to quantitatively gauge improvements in students' skills in inference, evaluation of arguments, and problem solving. Results from these assessments provide a clear indication of the extent to which critical thinking instruction has impacted students' abilities.



5.2 Key Quantitative Outcomes

Figure 3. Improvement in Critical Thinking Skills After Instruction

The figure above displays the improvement in students' critical thinking skills across three key areas: argument analysis, evidence evaluation, and problem solving, before and after critical thinking instruction. It illustrates a marked increase in scores after the instruction, highlighting the effectiveness of the pedagogical approaches used in enhancing these essential skills in political science courses.

1) Improvement in Argument Analysis: There was a statistically significant improvement in students'

ability to analyze and deconstruct arguments, with the average scores on related CAT questions increasing by 15% post-instruction.

- 2) Enhancement in Evidence Evaluation: Students demonstrated a 20% improvement in their ability to evaluate the reliability and relevance of sources of information, an essential skill in political analysis.
- 3) Better Problem Solving: There was an 18% increase in scores for questions related to problem-solving within political contexts, indicating that students are better equipped to handle complex political scenarios realistically.

5.3 Qualitative Findings

Qualitative data collected from interviews and focus groups provide deeper insights into how students perceive the impact of critical thinking instruction on their learning and analytical abilities.

Key Themes Identified: Increased Skepticism and Inquiry: Students reported a heightened sense of skepticism and a more inquisitive attitude towards political information. They felt more confident in questioning established norms and more adept at seeking out bias and assumptions in political arguments. Greater Confidence in Political Discourse: Many students expressed that critical thinking instruction had increased their confidence in participating in political discussions, debates, and analyses. They felt better prepared to articulate their views and counter opposing arguments effectively. Enhanced Decision-Making Abilities: Students noted an improvement in their decision-making skills, especially in scenarios requiring quick, well-informed choices based on complex information. This skill is particularly valuable in the fast-paced world of politics.

5.4 Discussion of Findings

The findings suggest that critical thinking instruction significantly enhances the political analysis skills of students. The ability to think critically not only improves academic performance but also prepares students for active and informed participation in political processes. This impact is evident in the increased capacity of students to engage with complex political issues, navigate through misinformation, and participate in democratic practices with greater competence and confidence.

The improvements in critical thinking skills also align with the educational goals set forth by UK higher education authorities, which emphasize the importance of developing such competencies among graduates. These skills are crucial for fostering a politically aware and engaged citizenry, capable of contributing to democratic governance and societal progress.

5.5 Implications for Policy and Practice

Based on the findings, it is recommended that political science programs across UK universities continue to emphasize and refine their critical thinking instruction. Further investment in training educators to effectively integrate critical thinking into their teaching practices is essential. Additionally, the development of new assessment methods that more accurately reflect the depth and breadth of critical thinking skills is crucial for ongoing curriculum development.

In conclusion, the integration of critical thinking instruction in political science courses has a profound impact on enhancing students' analytical skills, equipping them to better understand and engage with the political world around them. As political landscapes continue to evolve, the importance of fostering these skills becomes increasingly critical, underscoring the need for continued emphasis on high-quality, impactful education.

6. Discussion

This section delves into the interpretation of the findings from this study, situates them within the broader context of existing literature, and discusses both the theoretical and practical implications of critical thinking instruction in political science courses. Additionally, it acknowledges the limitations of the study, suggesting areas for further research.

The findings from this study corroborate and extend existing literature that underscores the significance of critical thinking in higher education, particularly within the field of political science. Previous research has consistently highlighted that critical thinking skills are crucial for students' academic and professional success (Ennis, 2018; Halpern, 2014). This study contributes to the body of knowledge by providing empirical evidence that structured critical thinking instruction not only enhances students' abilities to analyze and evaluate political information but also prepares them for active and informed participation in democratic processes. The improvement in skills such as argument analysis, evidence evaluation, and problem solving aligns with the assertions of Wingate (2010), who posited that engaging students in active learning practices significantly enhances their analytical capabilities. The positive changes observed in students' confidence and engagement in political discourse also support the findings of Abrami et al. (2015), who noted similar enhancements in students exposed to critical thinking pedagogies in various disciplines.

Theoretically, this study reinforces the cognitive theory of learning which posits that challenging cognitive tasks promote deeper learning and better retention of knowledge (Sweller, 1988). By engaging in critical thinking tasks, students are likely to process information at a deeper level, leading to more robust and flexible use of their knowledge in varied contexts, such as political reasoning and decision-making. Furthermore, the study adds to the constructivist educational theory by demonstrating that critical thinking instruction helps students construct their own understanding of political phenomena through active engagement and reflection (Piaget, 1950; Vygotsky, 1978). This process not only enhances their learning experience but also fosters a more profound sense of agency and responsibility towards political engagement.

Practically, the findings suggest that universities should continue to prioritize and expand their critical thinking curricula within political science courses. The significant improvements in student outcomes indicate that investing in faculty training and curriculum development for critical thinking instruction would yield substantial educational benefits. Universities might also consider incorporating a variety of teaching methods, such as problem-based learning and simulations, to cater to different learning styles and enhance the overall effectiveness of their programs. Policy-wise, the results support the need for educational policies that encourage the integration of critical thinking into the core curriculum across all levels of education. Such policies could mandate regular assessments and revisions of teaching methods to ensure they are effectively contributing to the development of critical thinking skills.

Limitations of the Study

While this study provides valuable insights, it has several limitations:

- i. Sample Size and Diversity: The study is limited to ten UK universities, which may not comprehensively represent all political science programs across the country. Further studies could expand the sample size and include more diverse institutions to enhance the generalizability of the findings.
- ii. Measurement Tools: Although the CAT is a robust tool for assessing critical thinking, reliance on this single instrument may not capture all dimensions of critical thinking relevant to political science. Future research should consider incorporating additional tools that can measure specific aspects of political reasoning and analysis.
- Longitudinal Impact: The study focuses on the immediate outcomes of critical thinking instruction. Longitudinal studies are needed to assess the long-term impact of these skills on students' academic and professional careers in political science.

In sum, the study confirms the effectiveness of critical thinking instruction in enhancing political analysis skills and underscores its importance for preparing students to engage thoughtfully and effectively in political matters. By addressing the limitations noted and expanding the scope of research, future studies can further illuminate the critical role of education in cultivating informed and active citizens.

7. Conclusion

This study has systematically examined the implementation and impact of critical thinking instruction in political science courses across UK universities. The findings contribute significant insights into pedagogical strategies that effectively enhance students' political analysis skills and underscore the value of critical thinking in higher education.

Summary of Key Findings: The integration of structured critical thinking instruction has led to measurable improvements in students' abilities to analyze arguments, evaluate evidence, and solve problems within political contexts. These enhancements are vital for their academic and professional development in political science. Students reported a greater sense of confidence and engagement in political discourse following critical thinking instruction. This not only reflects their enhanced analytical abilities but also indicates a deeper understanding and involvement in political processes. Various pedagogical approaches, including debates, problem-based learning, and reflective writing, have proven effective in fostering critical thinking skills. However, challenges such as resource limitations and student resistance highlight the need for continued innovation and support in teaching methods. The findings support cognitive and constructivist theories of learning, suggesting that active engagement and challenging cognitive tasks are crucial for deep and enduring learning. Practically, the study advocates for the broader implementation of critical thinking curricula, supported by appropriate educational policies and faculty development programs.

Recommendations: Educators should continue to integrate and refine critical thinking components in their courses. It is recommended to diversify teaching methods to cater to various learning styles and to ensure that critical thinking is consistently applied across different topics and course levels. Institutions should invest in regular professional development for faculty to keep them abreast of effective critical thinking pedagogies and technologies. This can empower educators to overcome challenges in student resistance and resource constraints.

Policymakers should advocate for and implement educational policies that embed critical thinking deeply within the curriculum. Policies should also support the development of new assessment methods that can more accurately measure the critical thinking skills relevant to political science. Adequate funding and resources should be allocated to facilitate small class sizes, pedagogical training, and the development of interactive learning materials that promote critical thinking.

Suggestions: Future studies should include a wider range of institutions, including diverse university types across different regions, to enhance the generalizability of the findings. Investigating the long-term effects of critical thinking instruction on students' career outcomes and civic engagement would provide deeper insights into the lasting impact of these educational interventions. Research should also focus on developing and validating new assessment tools that can more comprehensively evaluate the specific critical thinking skills required in political science. Comparing the effectiveness of different critical thinking instructional methods across various disciplines could help identify best practices that are transferable across fields.

In conclusion, this study underscores the crucial role of critical thinking in political science education and highlights the need for continued efforts to enhance instruction in this area. By embracing the recommendations provided and addressing the gaps identified through future research, educators and policymakers can significantly advance political science education, preparing students to be more analytical, reflective, and proactive citizens.

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