

EFL Students' Critical Reading of Argumentative Texts: A Paul-Elder Analysis

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ABSTRACT

Critical reading is a crucial academic skill for university students, particularly when evaluating English argumentative texts that require deep analytical engagement. However, a discrepancy remains between critical literacy frameworks and classroom practice, as many tertiary EFL students continue to rely on surface-level reading and overlook implicit arguments. This study aimed to analyze the critical reading skills of undergraduate English Department students at Universitas Negeri Semarang (UNNES) using Paul and Elder's Elements of Reasoning framework. Employing a qualitative descriptive design, the study involved 30 undergraduate students selected through purposive sampling. Data were collected through text-analysis tasks and reflective questionnaires. The data were analyzed through data reduction, categorization, interpretation, and identification of recurring patterns across the elements of reasoning. The findings showed that students could readily identify explicit elements, particularly purpose and evidence, but experienced greater difficulty detecting unstated assumptions and implicit implications. These findings indicate that students' critical reading abilities were stronger in recognizing explicit textual information than in analyzing underlying reasoning. The study highlights the need to explicitly integrate structured critical thinking frameworks into EFL reading instruction to support deeper textual analysis, critical reasoning, and reflective reading practices.

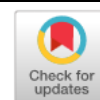
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INTRODUCTION

English literacy in higher education increasingly involves more than the ability to comprehend linguistic information; it also requires students to evaluate evidence, interpret perspectives, examine assumptions, and construct reasoned judgments. This demand is particularly important in EFL contexts, where university students are expected to engage with increasingly complex academic texts. Recent research has emphasized the central role of critical thinking in higher education and its integration into language learning, while studies on EFL have shown that critical thinking involves interconnected skills such as analysis, inference, evaluation, synthesis, and self-reflection (Hajmási et al., 2025; Negoescu, 2023; Teng & Zhang, 2021). In this context, critical reading can be understood as a higher-order reading practice in which learners move beyond identifying explicit information to examining how an author constructs, supports, and justifies an argument. Thus, effective critical reading requires not only adequate linguistic knowledge but also the ability to interrogate the reasoning underlying a text (Grabe & Stoller, 2020; Li & Liu, 2021).

Argumentative texts provide an especially appropriate context for examining this ability because readers must determine how claims are connected to evidence, identify underlying assumptions, and judge whether conclusions logically follow from the information presented. Unlike texts that primarily present factual or descriptive information, argumentative texts require readers to reconstruct relationships among claims, supporting evidence, interpretations, and conclusions. Readers therefore need to recognize both what is explicitly stated and what is implied within the author's reasoning. The ability to identify these

relationships is particularly important in academic contexts, where students frequently encounter arguments that involve multiple perspectives, complex evidence, and implicit assumptions. Consequently, examining students' performance when reading argumentative texts can provide insight into how effectively they engage with the deeper cognitive dimensions of academic literacy.

A useful framework for examining these cognitive processes is the Paul-Elder model of critical thinking. The framework conceptualizes reasoning through eight Elements of Reasoning: purpose, questions or problems, information, interpretation and inference, concepts, assumptions, implications and consequences, and point of view (Paul & Linda, 2019). These elements provide a systematic representation of how reasoning is constructed rather than treating critical thinking as a single, general ability. In critical reading, the framework enables researchers to examine not only whether students understand what a text says but also whether they can identify why the author makes particular claims, what evidence supports those claims, what assumptions underlie them, from which perspective the argument is constructed, and what implications follow from the reasoning.

The Paul-Elder framework is particularly relevant to argumentative reading because important aspects of an argument may remain implicit. Students may successfully identify an author's purpose or locate information in a text while experiencing greater difficulty recognizing assumptions, interpreting inferences, identifying points of view, or determining implications. These elements require readers to move beyond surface-level comprehension and reconstruct the reasoning that connects different parts of an argument. Previous research has demonstrated the relevance of structured critical-thinking frameworks in language education. For example, recent work on EFL argumentative writing has examined students' ability to identify and evaluate elements of reasoning, while other studies have demonstrated the value of explicit critical-thinking instruction for developing students' analytical engagement with argumentative texts (Muhsin et al., 2024; Pelenkahu et al., 2024). The Paul-Elder framework is therefore used in the present study not merely as a theoretical label but as an analytical lens for identifying specific components of students' reasoning during critical reading.

Despite increasing attention to critical thinking in EFL education, its implementation and assessment remain challenging. A systematic review by Li et al. (2022), for example, found that EFL teachers generally recognized the importance of critical thinking but did not always possess sufficiently developed understandings or instructional practices for teaching it explicitly. Recent studies likewise indicate that EFL students may demonstrate some aspects of critical thinking while experiencing difficulties with more complex forms of analysis, evaluation, and argumentation. In Indonesia, Ilyas & Arifin (2025) found that EFL students demonstrated critical thinking in argumentative writing through coherent argumentation, the use of evidence, engagement with counter-arguments, and logical organization, although they still faced challenges in synthesizing ideas and applying critical thinking consistently, while Pratiwi & Arifin (2025) reported that students could establish positions and provide basic reasons but experienced difficulties with evidence, counterarguments, and argumentative coherence. These findings indicate that critical-thinking competence may not develop evenly across different reasoning processes.

Research on critical reading has also highlighted the importance of students' metacognitive awareness and other learner-related factors in interpreting texts critically (Lailiyah & Wediyantoro, 2021; Tola et al., 2025). Such findings suggest that recognizing explicit information may be considerably easier for learners than interpreting the less visible reasoning structures that support an argument. Students may understand the general message of a text without necessarily being able to explain the assumptions behind an author's claims, the inferences derived from available information, or the implications of a particular argument. This distinction is important because critical reading requires readers to examine not only the content of a text but also the reasoning processes through which that content is presented and justified.

However, previous research has not sufficiently addressed the micro-level reasoning difficulties that EFL students encounter when critically reading argumentative texts through a systematic set of reasoning elements. Existing studies have tended to examine critical thinking as a general ability, investigate its relationship with writing performance, evaluate instructional interventions, or analyze students' argumentative writing products (Muhsin et al., 2024; Pelenkahu et al., 2024; Pratiwi & Arifin, 2025). Although these approaches provide valuable evidence about students' overall critical-thinking performance, they offer less detailed information about which specific reasoning elements students can recognize successfully and which remain difficult during the reading process. In particular, limited attention has been given to the distinction between more explicit elements, such as purpose and information, and more implicit elements, such as assumptions, inferences, point of view, and implications. Therefore, a more fine-grained analysis is needed to identify where critical reading difficulties occur within the reasoning structure of argumentative texts.

The present study addresses this gap by examining the critical reading of undergraduate English Department students at Universitas Negeri Semarang (UNNES) who have received formal instruction in critical reading. Rather than treating critical reading as a single undifferentiated ability, the study applies the Paul-Elder Elements of Reasoning as an analytical framework to identify the specific reasoning components that students can and cannot recognize in argumentative texts. The framework is particularly significant for this purpose because its eight elements provide observable categories for examining how readers reconstruct an author's reasoning, including the identification of purpose, questions, information, concepts, assumptions, inferences, implications, and points of view. This analytical structure allows the study to move beyond determining whether students are generally "good" or "weak" critical readers and instead identify the particular cognitive elements that constitute their strengths and difficulties. The study therefore addresses three research questions: (1) Which of Paul and Elder's reasoning elements can UNNES English Department students accurately identify in argumentative texts? (2) Which reasoning elements pose the greatest difficulties for these students? and (3) What self-reported challenges do students experience when attempting to identify these elements? By answering these questions, the study provides a more fine-grained account of critical reading performance and offers evidence that can inform the explicit teaching of critical reasoning in tertiary EFL reading instruction.

METHOD

Respondents

This study employed a descriptive qualitative design to examine undergraduate students' critical reading performance and self-reported difficulties when analyzing an English argumentative text through the Paul-Elder Elements of Reasoning framework. A descriptive qualitative design was selected because the study aimed to provide a detailed description of the reasoning elements that students could identify, the elements that presented difficulties, and the challenges they experienced during the reading process, rather than to test the effectiveness of an instructional intervention or establish statistical relationships among variables. The participants were undergraduate students in the English Department at Universitas Negeri Semarang (UNNES) who had completed the department's mandatory critical reading course. Purposive sampling was used because the study required participants who had already received formal instruction in critical reading and therefore had relevant background knowledge for applying the analytical framework. Students were included if they were enrolled in the English Department, had successfully completed the required critical reading coursework, and voluntarily participated in the study. Students who had not completed the course or did not submit the complete reading task and reflection were excluded from the analysis. This selection process ensured that the participants represented the intended group of trained EFL readers whose ability to apply structured critical-reading principles could be examined.

Instruments

Data were collected through two complementary instruments administered through Google Forms: an argumentative-text analysis task and a reflective questionnaire. The reading task used an English argumentative text concerning educational policy and sociology, adapted from an academic opinion article published in *The Conversation*, entitled *What You Study in School Shapes Your Voting Choices in Adulthood* (2024). The text was selected purposively because it contained identifiable argumentative components, including claims, supporting information, assumptions, interpretations or inferences, concepts, points of view, and implications. Participants were asked to analyze the text according to the eight Elements of Reasoning in the Paul-Elder framework: purpose, question or problem, information, interpretation and inference, concepts, assumptions, implications and consequences, and point of view (Paul & Elder, 2019). Each element was accompanied by an open-ended prompt requiring students to identify or explain the corresponding reasoning component in their own words. The second instrument was a reflective questionnaire designed to address the third research question. It consisted of Likert-type statements and open-ended questions concerning students' perceived difficulties during the task, including unfamiliar vocabulary, difficulty understanding complex sentences, difficulty identifying implicit information, difficulty distinguishing assumptions from evidence, and difficulty applying the Elements of Reasoning. The combination of the two instruments enabled the study to examine students' actual written responses to the text alongside their own accounts of the difficulties they experienced during the analysis.

Procedures

The study was conducted in four stages. First, the argumentative text was selected based on its relevance to the study objectives and its potential to provide sufficient material for analyzing the eight Elements of Reasoning. The analytical prompts were then developed by mapping each question onto the corresponding element of the Paul-Elder framework. Second, the finalized reading task and reflective questionnaire were entered into Google Forms and distributed to eligible participants through the department's academic communication channels. Third, participants completed the argumentative-text analysis task individually in a single session and subsequently completed the reflective questionnaire. They were instructed to provide answers based on their own understanding of the text and to explain their reasoning where required. Finally, all responses were collected, organized, and checked for completeness before analysis. Students' names were not used in the analytical dataset, and the responses were treated as research data for the purposes of describing patterns in critical reading performance and perceived difficulties.

Data Analysis

The reading-task responses were analyzed descriptively using a predefined three-point rubric based on the critical-thinking standards of clarity, accuracy, and depth within the Paul-Elder framework (Paul & Linda, 2019). A score of 3 indicated that the student accurately identified and adequately explained the relevant reasoning element; a score of 2 indicated a partially correct, incomplete, or insufficiently explained response; and a score of 1 indicated an inaccurate response or failure to identify the element. The scores were used descriptively to distinguish patterns of stronger and weaker performance across the eight reasoning elements rather than to make statistical generalizations. The open-ended responses from the reflective questionnaire were then analyzed thematically by identifying recurring descriptions of students' difficulties, which were grouped into categories such as vocabulary limitations, textual complexity, difficulty interpreting implicit meaning, and uncertainty in applying the reasoning framework. Finally, findings from the text-analysis task and reflective questionnaire were compared to provide a more comprehensive description of students' critical reading performance and the difficulties they reported during the analytical process.

FINDINGS AND DISCUSSION

This section presents the empirical data obtained from the text-analysis task and the reflective questionnaire completed by the English Department students at Universitas Negeri Semarang. The findings and their subsequent discussions are structurally categorized to directly address the three primary research questions guiding this study.

Accurately Identified Elements of Reasoning

To address the first research question regarding which elements students could accurately identify, the students' written responses were evaluated using a 3-point scoring rubric (3 = Accurate, 2 = Partial/Vague, 1 = Inaccurate). Table 1 illustrates the distribution of the 22 students' analytical performance across the elements.

Table 1. Distribution of Students' Scores on the Elements of Reasoning

Elements of Reasoning	Score 3 (Accurate)	Score 2 (Partial)	Score 1 (Inaccurate)
Purpose	90.9%	0.0%	9.1%
Question at Issue	72.7%	13.6%	13.6%
Information / Evidence	90.9%	0.0%	9.1%
Point of View	95.5%	4.5%	0.0%
Assumptions (Implicit)	45.5%	50.0%	4.5%
Implications (Implicit)	90.9%	4.5%	4.5%

The empirical data reveals that a significant majority of the respondents successfully achieved a Score of 3 in identifying explicit elements, particularly the author's Point of View (95.5%), Purpose (90.9%), and Information/Evidence (90.9%). For instance, Respondent 21 accurately extracted the core purpose by stating, "To explain that the subjects students study in secondary school can influence their political orientation and to discuss the implications for curriculum reform."

The high success rate in identifying these explicit components indicates that the students are highly proficient at literal extraction and grasping explicit consequences. This aligns with foundational L2 reading theories which posit that advanced EFL learners can easily navigate visible textual markers (Azhipa et al., 2026; Jaya et al., 2026). However, this proficiency remains heavily tethered to surface-level reading habits rather than deep structural evaluation, which serves as a baseline to understand their subsequent cognitive limitations in more complex reasoning tasks.

Cognitive Difficulties in Implicit Reasoning Elements

Addressing the second research question, the data highlights a specific and stark decline in accuracy when students were tasked with identifying the most hidden implicit element within the argumentative text: the unstated Assumptions. While students easily identified explicit implications, only 45.5% could accurately identify the author's underlying assumptions. Half of the respondents (50.0%) provided overly vague or text-bound responses (Score 2). Instead of identifying the author's hidden logical leap, many students simply restated explicit facts from the text. Respondent 14 demonstrated this text-bound confusion by writing: "One underlying assumption is that different school subjects influence the way students think and view the world," which is a stated premise rather than an unstated assumption.

This specific difficulty in detecting true unstated assumptions reveals a critical cognitive breakdown. This phenomenon confirms the findings of Zhou et al. (2015), who emphasize that EFL readers often experience severe cognitive overload when required to infer implicit biases. Furthermore, this inability to parse unstated logic is frequently reflected in students' struggles with argumentative writing tasks (Pratiwi & Arifin, 2025). Unlike explicit facts or stated implications, mapping the taxonomy of underlying logical structures requires higher-order cognitive engagement (Li & Liu, 2021). The students' inability to unearth the structural foundations behind the text's claims demonstrates that while they comprehend what is

written, they struggle to evaluate the invisible logic holding the argument together. This empirical evidence reinforces the urgent need for critical thinking-based instruction.

Self-Reported Challenges in Text Deconstruction

To address the third research question, thematic analysis was applied to the open-ended reflective questionnaire. The data highlights two primary barriers experienced by the students. First, a vast majority of students explicitly cited the complexity of logic (Critical Thinking) and the abstract nature of uncovering assumptions as their primary hurdles. As Respondent 16 insightfully noted, "Assumptions are the hardest to identify because they are implicit. Unlike goals or evidence which are stated directly... Finding them requires reading between the lines to deduce what must be true for the argument to hold." Second, a smaller but significant portion of students reported that linguistic barriers compounded their cognitive struggles. Respondent 0 reflected this by stating, "Mostly due to vocabulary and grammar (linguistic)... I also found it challenging since my English skills are still developing, so I had to read the text several times to understand the author's ideas."

The self-reported data clarifies that the students' struggles are not solely critical thinking deficits, but are compounded by linguistic limitations and their established attitudes toward L2 reading. As highlighted by [Lailiyah & Wediyantoro \(2021\)](#), students' beliefs and attitudes significantly dictate their cognitive persistence. When faced with complex underlying logic, many respondents reverted to basic surface-level reading strategies rather than applying the critical reading framework. This suggests that incorporating explicit critical thinking evaluations must be consistently paired with integrated reading and writing skills instruction to successfully bridge the gap between literal comprehension and genuine critical literacy.

CONCLUSIONS

This study concludes that undergraduate English Department students at Universitas Negeri Semarang (UNNES) demonstrated stronger ability to identify explicit reasoning elements in argumentative texts than to recognize implicit ones when analyzed through Paul and Elder's Elements of Reasoning framework. Students were generally able to identify elements such as purpose, point of view, and information or evidence, whereas unstated assumptions and implicit implications presented greater difficulties. The students' reflections further indicated that these difficulties were associated with challenges in interpreting implicit meaning, understanding complex textual structures, dealing with unfamiliar vocabulary, and applying the reasoning framework to the text. Theoretically, the study contributes a more fine-grained understanding of critical reading by demonstrating the usefulness of the Paul-Elder framework for distinguishing students' strengths and difficulties across specific reasoning elements rather than treating critical reading as a single general ability. Practically, the findings suggest that EFL reading instruction should explicitly guide students in identifying and questioning implicit assumptions, inferences, and implications through structured analytical tasks, while providing linguistic support for unfamiliar vocabulary and complex texts. Thus, the study provides a diagnostic basis for designing critical reading activities that move students from literal comprehension toward more systematic analysis of the reasoning underlying argumentative texts.

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REFERENCES

- Azhipa, D. P., Daflizar, D., & Musdizal, M. (2026). Indonesian EFL undergraduate students' perceptions of English critical reading. *Journal of English Language and Education*, 11(1), 1046–1056.
- Grabe, W., & Stoller, L. F. (2020). Teaching and researching reading. In Routledge <https://doi.org/10.4324/9780429277917-11>
- Ilyas, H. P., & Arifin, S. (2025). Critical thinking in EFL students' argumentative writing: Manifestations and challenges. *Voices of English Language Education Society (VELES)*, 9(2). <https://doi.org/10.29408/veles.v9i2.29656>
- Jaya, S., Kusmiarti, R., & Paulina, Y. (2026). Developing critical reading behaviors through guided close reading of research articles. *Indonesian Journal of Educational Development (IJED)*, 6(4), 1569–1587.
- Lailiyah, M., & Wediyantoro, P. L. (2021). Critical thinking in second language learning: Students' attitudes and beliefs. *International Journal of Language Education*, 5(3), 180–192.
- Li, X., & Liu, J. (2021). Mapping the taxonomy of critical thinking ability in EFL. *Thinking Skills and Creativity*, 41.
- Li, X., Wang, Y., & Other. (2022). How do English-as-a-foreign-language (EFL) teachers perceive and engage with critical thinking: A systematic review from 2010 to 2020. *Thinking Skills and Creativity*, 43, 101002.
- Muhsin, M. A., Bahar, Asse, A., Syamsuri, A. S., Setiawan, S., Baharuddin, Aminullah, Ariani, N., & Mutmainnah. (2024). Critical thinking pattern in argumentation: A study on EFL higher education students in Indonesia. *International Journal of Learning in Higher Education*, 31(1), 177–194.
- Negoescu, A. G. (2023). The value of critical thinking in the language classroom. *Land Forces Academy Review*, 28(4), 303–308.
- Paul, R., & Linda, E. (2019). The miniature guide to critical thinking concepts and tools. In *The Foundation for Critical Thinking* <https://doi.org/10.5771/9781538133798-51>
- Pelenkahu, N., Ali, M. I., Tatipang, D. P., Wuntu, C. N., & Rorintulus, O. A. (2024). Metacognitive strategies and critical thinking in elevating EFL argumentative writing proficiency: Practical insights. *Studies in English Language and Education*, 11(2), 873–892.
- Pratiwi, M., & Arifin, S. (2025). Exploring critical thinking and writing challenges in EFL students' argumentative essays. *Professional Journal of English Education*, 8(6), 1581–1589 <https://doi.org/10.29408/veles.v9i2.29656>
- Teng, F., & Zhang, Y. (2021). The impact of deep learning strategies on EFL learners' reading performance and metacognition. *Language Teaching Research*, 25(2), 238–256.
- Tola, B., Hula, I. R., Pateda, L., & Mariana, A. (2025). Comparison of critical thinking ability and metacognitive skills on PPG PAI learning outcomes. *jpi (jurnal pendidikan Indonesia)*, 14(2), 477–486.
- Zhou, J., Jiang, Y., & Yao, Y. (2015). The investigation on critical thinking ability in EFL reading class. *English Language Teaching*, 8(1), 83–94.