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University of Southampton

Faculty of Arts and Humanities

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Learning to Argue and Arguing to Learn: Unpacking the Nature of Criticality Development in English for Academic Purposes for Political Science in a Thai University Context

by

Sirawit Apairach

Thesis for the degree of Doctor of Philosophy in Applied Linguistics:
English Language Teaching

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Abstract

Faculty of Arts and Humanities

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Doctor of Philosophy in Applied Linguistics: English Language Teaching

Learning to Argue and Arguing to Learn: Unpacking the Nature of Criticality
Development in English for Academic Purposes for Political Science in a Thai University
Context

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This study investigates the nature of criticality development in English for Academic Purposes (EAP) for Political Science at a Thai public university, focusing on how argumentation and critical thinking evolve. Guided by an interpretivist research paradigm, it employs a qualitative case study approach to explore educators' conceptualisations of criticality, examine pedagogical practices through classroom observations, and analyse discourse patterns and linguistic demands in argumentative writing. Drawing on Johnston et al.'s (2011) model of developmental criticality and integrating frameworks such as “Learning to Argue” and “Arguing to Learn,” the research highlights the progression from foundational argumentative skills to advanced critical engagement.

Key findings indicate that the development of criticality is deeply intertwined with argumentation practices, as revealed through interviews, classroom observations, and argument analysis. Interviews with educators shed light on varying conceptualisations of criticality, influencing pedagogical approaches and expectations. Observations of classroom interactions reveal that while structured guidance is crucial for developing foundational argumentative skills, it is also essential to balance this with opportunities for students to explore and critically engage with complex, discipline-specific issues. The analysis highlights how students develop from using simple argument structures to employing advanced techniques, such as effectively countering opposing views and presenting well-supported arguments, reflecting a higher level of critical engagement and understanding of the subject matter. Collectively, these findings suggest the multifaceted nature of criticality and show that effective argumentation encompasses both foundational skills and advanced, discipline-specific inquiry.

The study identifies distinct stages in criticality development, from early guided practices to autonomous, sophisticated argumentation and demonstrates how argumentation skills develop alongside criticality. It highlights the importance of structured pedagogical frameworks and the role of disciplinary content in shaping critical practices. This thesis contributes to a nuanced understanding of criticality development and suggests that EAP should better support students in bridging language proficiency with disciplinary knowledge. It calls for future research to further explore how instructional strategies and interdisciplinary approaches can enhance criticality across various academic contexts.

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Research Thesis: Declaration of Authorship

Print name: SIRAWIT APAIRACH

Title of thesis: Learning to Argue and Arguing to Learn: Unpacking the Nature of Criticality Development in English for Academic Purposes for Political Science in a Thai University Context

I declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before

Signature: Date: 6 February 2025.....

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Definitions and Abbreviations

- Academic literacies.....An approach to understanding and addressing the challenges students face when engaging in academic writing and reading. It views literacy practices as socially situated and recognises the diversity of language use in academic contexts, focusing on the development of students' ability to navigate and critically engage with academic texts and discourses.
- AppraisalA framework within Systemic Functional Linguistics (SFL) that explores how language expresses attitudes, judgments, and emotional responses. It includes three subsystems: *Attitude* (expressing feelings), *Engagement* (managing dialogic space), and *Graduation* (scaling intensity or degree). Appraisal resources are crucial in argumentative discourse, where they help convey the strength and validity of arguments
- ArgumentationThe process of constructing and presenting arguments, typically involving the development of claims, evidence, and reasoning to persuade or inform an audience. In academic contexts, argumentation is essential for critical thinking and is often structured according to models like Toulmin's to ensure clarity and logical coherence.
- CLIL Content and Language Integrated Learning: An educational approach where students learn a subject and a second language simultaneously. CLIL integrates content learning with language development, helping students improve their language skills while acquiring subject-specific knowledge.
- CriticalityA broad concept encompassing the ability to engage critically with ideas, texts, and practices. It involves questioning assumptions, evaluating evidence, and considering multiple perspectives. Criticality is often seen as foundational to critical thinking, particularly in academic contexts where deeper analysis and reflection are required. It is multifaceted and developmental.
- Critical ThinkingThe ability to analyse, evaluate, and synthesise information in a reasoned and reflective manner. Critical thinking involves questioning assumptions, identifying biases, and making reasoned

Definitions and Abbreviations

judgments based on evidence. It is a key skill in academic contexts, where it underpins effective argumentation and decision-making.

- EAP.....English for Academic Purposes: A branch of English language teaching that focuses on developing the academic language skills needed for success in higher education. EAP courses typically cover areas such as academic writing, reading, listening, and speaking, with an emphasis on the conventions and expectations of academic discourse.
- GenreA category of texts or communicative events that share similar conventions, structures, and purposes. In academic writing, genres include research articles, essays, reports, and reviews, each with specific features and expectations. Understanding genre is essential for students to effectively produce and interpret academic texts.
- Interpretivism.....A research paradigm that emphasises the understanding of social phenomena from the perspectives of those involved. It focuses on the subjective meanings and interpretations that people attach to their experiences, often using qualitative methods to explore these meanings in depth.
- SFLSystemic Functional Linguistics: A theory of language that views language as a social semiotic system. SFL underlines the functional aspects of language, focusing on how language is used to achieve specific purposes in social contexts. It is particularly concerned with how meaning is constructed through choices in the linguistic system, such as through the use of Appraisal resources.
- Toulmin's modelA framework for analysing and constructing arguments, developed by Stephen Toulmin. The model identifies six key components of an argument: *Claim* (the main point or thesis), *Data* (evidence supporting the claim), *Warrant* (the reasoning linking data to the claim), *Backing* (additional support for the warrant), *Qualifier* (indicating the strength of the claim), and *Rebuttal* (counterarguments or limitations). Toulmin's model is widely used in teaching and assessing argumentative writing.
- Thematic analysisA method for identifying, analysing, and reporting patterns (themes) within qualitative data. It involves systematically coding data to identify significant themes that capture important aspects of the

Definitions and Abbreviations

research question. Thematic analysis is a flexible approach that can be applied across a range of qualitative research designs.

Chapter 1 Introduction

1.1 My Positionality: Higher Education and Criticality

As a language educator, my view of education transcends the mere acquisition of subject knowledge or meeting academic assessment criteria. Education, in its true essence, encompasses the broader ethos of human development—how individuals perceive and reflect themselves and the world, and their ability to engage critically and independently with their surroundings. I contend that contemporary society requires active and responsible citizens capable of navigating a rapidly changing world, including social, economic, political, and educational dimensions.

In the current era of economic globalisation and the prevalence of marketisation and neoliberalism, higher education assumes a central role in workforce preparation and beyond. However, I believe that the essence of good education extends beyond vocational training; it should strive to cultivate both subject expertise and a critical mindset. While the acquisition of subject knowledge can be achieved through structured study, fostering criticality involves a more abstract and complex process. Tertiary institutions serve as critical spaces where academia intersects with the broader world, providing opportunities for individuals to develop critical thinking skills and engage meaningfully with societal issues. There is a growing concern among employers about the gap between academic learning and job readiness which emphasises the importance of problem-solving skills, communication, and resilience (Chamorro-Premuzic & Frankiewicz, 2019), which are often underemphasised in traditional curricula. This aligns with my contention that good education should cultivate not only subject expertise but also a critical mindset, preparing students to navigate and contribute to a rapidly changing world.

This study endeavours to examine the multifaceted nature of criticality within the context of an English for Academic Purposes (EAP) course tailored for political science undergraduates at a Thai university. Specifically, the focus lies on the teaching and learning of argumentation, aiming to elucidate how criticality manifests in this curriculum and practice. In an era where educational institutions increasingly espouse the importance of criticality, it is imperative to examine further how this concept translates into disciplinary practice. By exploring individual perceptions and experiences, classroom discussions, and written products of argumentation, this study offers valuable insights into the educational and argumentative processes that shape students' critical thinking abilities. Understanding the nature of criticality development within

this specific context contributes to a broader discussion on the potential trajectories of criticality within the social sciences, academic literacies, and English language education.

1.2 Thai Higher Education and English Language Teaching: A Criticality Gap

The landscape of teaching and learning in higher education is constantly evolving. In Thailand, higher education plays a pivotal role in responding to the demands of the workforce and the challenges of economic globalisation (Chalapati, 2007). As noted by the Office of National Higher Education Science Research and Innovation Policy Council (NXPO, 2020), Thailand's transition towards an innovation-driven economy has led to increased demands for highly skilled professionals in key industries. Consequently, Thai universities have undergone significant intellectual and strategic realignment to meet these economic demands (Chalapati, 2007). However, a concerning trend has emerged wherein the focus on meeting industry needs has overshadowed the development of critical thinking, reflective practice, and independent thought among students. Reports from NXPO (2022a) point out this imbalance, indicating a predominant emphasis on workforce preparation within higher education. Despite mentions of criticality development in contexts promoting human values, social changes, and sustainability, specific references to critical thinking skills are noticeably absent from these discussions. This gap highlights the need for a critical examination of how Thai higher education addresses criticality in its curricula.

As a member of the Association of Southeast Asian Nations (ASEAN), Thailand places particular emphasis on the role of English in higher education. Designated as the official language of communication among ASEAN nations, English has evolved from a foreign language to a medium of instruction across various disciplines in Thai universities (Kirkpatrick, 2011). This shift reflects the imperatives of globalisation and internationalisation, wherein English proficiency is perceived as essential for national modernisation and effective participation in the global arena (Kirkpatrick, 2017). Despite the proliferation of English medium instruction (EMI) programs and the integration of English language courses such as English for Academic Purposes (EAP) into the curriculum, English language proficiency among Thai learners remains comparatively lower than in neighbouring countries (Wiriyachitra, 2002; Noom-ura, 2013). Additionally, Thailand's higher education system has been criticised for its inability to adequately meet the demands of a competitive economy (NXPO, 2020). The pursuit of internationalisation, driven by goals of global competitiveness, has led to the implementation of top-down initiatives that often overlook the realities of teaching and learning within local contexts (Hüttner, 2019).

Amidst the rise of international programs in Thai universities, most students still receive instruction in their native language, with English for Academic Purposes (EAP) courses playing a crucial role in their curriculum. Unlike general English courses, EAP is tailored to the specific needs of academic disciplines, equipping students with the linguistic tools necessary for success in their fields. In Thailand, EAP is categorised under English for Specific Purposes (ESP), alongside English for Occupational Purposes (EOP) (Soranastaporn, 2018). EAP's academic focus includes effective teaching and assessment practices, the linguistic and discoursal structures of academic texts, and the cognitive, social, and linguistic demands of specific disciplines (Hyland & Shaw, 2016). This interdisciplinary approach presents challenges for EAP practitioners, who must navigate the unique conventions and genres of each academic field. Within the social sciences and humanities, political science holds a significant position, characterised by its emphasis on deliberation, decision-making, and power distribution. Political science education demands the development of critical thinking skills, including the ability to generate hypotheses, test arguments, identify logical fallacies, and evaluate information from multiple perspectives (Hüttner, 2014).

Furthermore, the nature of the discipline necessitates effective argumentation, as students are expected to analyse, critique, and formulate arguments based on real-world events and theoretical frameworks (Weixing, 1997). Therefore, proficiency in argumentation serves as a crucial function for expressing and defending opinions, negotiating decisions, and participating in political discourse (Andrews, 2015). These interdisciplinary demands underline the necessity for EAP practitioners to develop tailored instructional strategies that address the unique linguistic and rhetorical needs of political science students and ultimately equip them with the skills to effectively navigate complex academic and professional discourses. Given the inattention to criticality development, the ever-increasing role of English language education, and disciplinary practices in Thai higher education, this study contends that a critical examination of tertiary practices is indispensable.

1.3 Framing the Study in Context

Criticality is paramount in higher education, shaping curriculum policies, assessment strategies, and pedagogical approaches. Johnston et al. (2011) emphasise the importance of understanding criticality and its development in diverse educational settings and its relevance for curriculum policies, assessment strategies, and pedagogical approaches in higher education. Dunne (2015) further underscores the centrality of criticality in higher education and its pivotal role in shaping educational practices and outcomes. Building upon these foundational insights, this study examines the intersection of argumentation and critical

thinking within Thai higher education. Numerous studies have demonstrated the close relationship between argumentation and critical thinking (Andrews, 2007; Aston, 2023; Hirvela, 2017; McKinley, 2015; Ngajie et al., 2018; Zou et al., 2021), highlighting the significance of argumentative skills in fostering criticality among students.

The economic imperatives of globalisation and internationalisation pose a challenge to higher education, which must balance these demands with the cultivation of critical thinking skills among graduates (Barnett, 1997). While a college degree may still lead to higher-paying jobs, the actual value of such degrees is diminishing as they become more commonplace (Chamorro-Premuzic & Frankiewicz, 2019). This trend highlights the growing emphasis employers place on critical soft skills, such as problem-solving and collaboration, alongside academic qualifications. Although higher education has made strides in fostering critical thinking and argumentation abilities, there remains a need to further integrate these skills across curricula to ensure students are fully prepared for the demands of the modern workforce. In political science, the intertwining of argumentation and critical thinking is evident, with political ideas and analyses being inherently rhetorical (Finlayson, 2004). Despite the importance of critical thinking and argumentation in political science, there remains a need for further research on the intersection of the two, particularly within second language education (Hirvela, 2017).

This study aligns with the concept of a "community of practice," (Wenger, 1998; Hyland & Hamp-Lyons, 2002; Hamp-Lyons, 2011; Canagarajah, 2002, 2014) which refers to groups of people who share a concern, a set of problems, or a passion for a topic and deepen their knowledge and expertise through regular interaction. It explores how argumentation is taught, learned, and conceptualised within Thai higher education and political science education. Additionally, it draws on the notion of a "discourse community," (Swales, 1990; Hyland, 2005a) defined as a group of individuals who communicate within a shared set of goals, norms, and genres, often specific to particular disciplines, to investigate discipline-specific argumentative writing as a genre embedded within the academic practices of the EAP course. The notion of criticality, evolving from a set of higher-order skills, now encompasses diverse approaches to textual practices within specific political and institutional contexts (Luke, 2004). Different constituencies in higher education interact with overarching educational agendas in specific ways, influencing the nature and extent of criticality they embody (Johnston et al., 2011). Barnett (1997) argues that while tertiary institutions are often associated with critical thought, there is a tendency to construe criticality narrowly and overlook its broader socio-political dimensions. This oversight is particularly pertinent in the context of Thai higher education, where the emphasis on producing a globally skilled workforce has raised questions about the alignment of educational practices with the ideal of criticality.

In political science, the integration of argumentation with critical thinking presents ongoing challenges in understanding how these elements collectively shape criticality (Finlayson, 2004), particularly within the context of second language education (Hirvela, 2017). Few studies have sought to disentangle the relationship between specific critical thinking skills and dispositions within EAP learning, making it difficult to generalise this ability across disciplines and to teach or assess it effectively in an EAP setting (Yin et al., 2024). To address these gaps, this study adopts interpretivism as a theoretical lens. By examining the role of argumentation as a platform for developing criticality among students, this research aims to provide a comprehensive account of criticality development via argumentation. It seeks to shed light on the complex interplay between language, disciplinary knowledge, and critical thinking.

1.4 Research Objectives and Research Questions

The present study aims to investigate the nature of criticality development within the context of English for Academic Purposes (EAP) for political science through the teaching and learning of argumentation at a Thai public university. Despite its importance in higher education, the concepts, developmental pathways, and implementation of criticality remain unclear, heavily influenced by disciplinary practices. As a qualitative case study, rooted in an interpretivist paradigm (Cohen et al., 2018; Peel, 2020), this study seeks to understand criticality development through individual perceptions, classroom interactions, and argumentative discourse in a disciplinary EAP context. The research objectives are threefold investigation of:

1.4.1 Conceptualisations of Criticality and Argumentation

This objective investigates how EAP and political science teachers conceptualise criticality and argumentation, drawing on insights from Wingate (2012), Bacha (2010), and Clarence and McKenna (2017). It seeks to delineate the conceptual and operational boundaries of criticality within disciplinary EAP, acknowledging the influence of local academic cultures on syllabus design, classroom activities, and disciplinary texts (Canagarajah, 2002, 2014). Understanding teachers' perceptions is essential for grasping the nature of criticality development in educational settings. Teachers, particularly non-native English speakers in EAP, play a crucial role in preparing students to navigate disciplinary language and academic communities (Flowerdew, 2019; Hyland & Hamp-Lyons, 2002). Clarence and McKenna (2017) stress the importance of engaging critically with academic discourse and developing argumentation skills within political science, which aligns with this research's focus on teachers' perceptions and practices related to criticality in disciplinary EAP. By incorporating perspectives from political

science educators, the study aims to capture disciplinary expectations and practices related to criticality and argumentation. The guiding questions are:

- *How are criticality and argumentation conceptualised and related? What role do they play given the nature of inquiry in political science?*

1.4.2 Pedagogical Practices and Strategies for Criticality through Argumentation

This objective aims to deepen understanding of how instructional approaches and strategies within the course—EAP for Political Science—reflect the underlying nature of criticality through argumentation. Building upon the work of Bricker & Bell (2008) and Hirvela (2017, 2021), the study investigates the impact of classroom discourse and pedagogical methods on students' ability to write and argue effectively. By conducting classroom observations, the research aims to provide empirical evidence of argumentative practices in action, highlighting the foundational role of criticality in shaping effective argumentation and the importance of nurturing a reflective mindset for critical inquiry within the discipline. It also addresses the challenges and complexities of guiding students through persuasive writing strategies, especially in an online learning environment. The question aligned with this objective is:

- *How do instructional approaches and strategies in argumentation reflect the underlying nature of criticality development?*

1.4.3 Critical Discourse Patterns and Linguistic Demands for Criticality in Argumentative Writing

This objective aims to uncover the discourse patterns and linguistic choices in argumentative writing that express criticality, alongside the linguistic demands and socio-cultural influences specific to political science (Basturkmen, 2022). Through a Toulminian analysis, it assesses the effectiveness of students' argument structures. Additionally, drawing on systemic functional linguistics (SFL), the study explores what constitutes "critical" discourse in the argument genre, focusing on linguistic patterns related to interpersonal meanings and appraisal resources (Pessoa et al., 2017; Martin & White, 2005). Dreyfus et al. (2016) underline the complexity of argumentative discourse in academic contexts, emphasising the role of appraisal resources in conveying argument strength and validity. This study therefore focuses on how appraisal resources in counterarguments and refutations reveal insights into students' negotiation and critique of diverse perspectives, a crucial aspect of criticality in political science. The questions under this objective include:

- *How does the effectiveness and persuasiveness of students' argumentative writing compare between high- and low-scoring groups when considering the elements of a Toulminian analysis?*
- *How do the effectiveness and persuasiveness of counterarguments and refutations compare between high- and low-scoring groups when considering the utilisation of appraisal resources?*

This objective sheds light on the linguistic demands of the argumentative genre and how these potentially enhance the persuasiveness and express criticality of written argumentation.

Through triangulation, this provides a comprehensive understanding of the nature of criticality development in this context.

1.5 Overview and Thesis Structure

This present study explores the nature of criticality development through argumentation within the context of English for Academic Purposes (EAP) in a Thai higher education setting. This first chapter introduces the research by situating it within broader discourses on higher education, criticality, disciplinary practices, and English language teaching, particularly addressing the gap in fostering critical engagement in Thai EAP classrooms. It outlines the research objectives and questions, focusing on three key areas: conceptualisations of criticality and argumentation, pedagogical practices and strategies for criticality development, and the critical discourse patterns and linguistic demands in argumentative writing.

The subsequent chapters expand on these themes. Chapter 2 reviews theoretical frameworks and debates on criticality, critical thinking, and their intersections with academic literacies, EAP, and disciplinary contexts. Chapter 3 provides an in-depth exploration of argumentation, integrating perspectives from Toulmin's model, genre-based approaches, and systemic functional linguistics (SFL) to develop a conceptual framework for the study. Chapter 4 details the research design, context, and methodology, describing the qualitative approach used to investigate teacher and student practices, perspectives, and writing outputs.

The findings are presented in Chapters 5, 6, and 7 based on different data sources. Chapter 5 focuses on insights from interviews with EAP instructors and political science lecturers highlighting conceptualisations and experiences, while Chapter 6 analyses classroom observations to uncover instructional practices and challenges related to criticality development and argumentation. Chapter 7 examines students' argumentative writing using the Toulminian and appraisal analyses to identify patterns and variations in critical discourse.

Finally, Chapter 8 synthesises the findings, discussing their implications for fostering criticality through argumentation in EAP and disciplinary contexts. The chapter concludes by offering recommendations for future research and practical applications in EAP and English language education. This structure provides a cohesive narrative that bridges theoretical perspectives with empirical evidence.

Chapter 2 Theoretical Conceptualisations of Criticality

*“A mode of thought does not become ‘critical’ simply by attributing that label to itself,
but by virtue of its content.”*

(Sokal, 1999, p. 22 in Chen & Dervin, 2020)

The study of criticality in higher education is deeply rooted in the evolving theories of critical thinking. This chapter explores the diverse theoretical perspectives on critical thinking, tracing its development from early skill-based models to more complex views encompassing dispositions and subject-specific knowledge. Situated within the context of English for Academic Purposes (EAP) tailored for political science undergraduates, this research draws on theoretical perspectives and ongoing scholarly debates to provide an overview of critical thinking's intellectual landscape. By examining key theoretical contributions, the chapter sets the stage for exploring how criticality manifests in higher education context with a disciplinary focus.

2.1 Critical Thinking

Navigating the landscape of critical thinking within educational contexts reveals a complex concept subject to diverse interpretations and evolving theoretical frameworks. Initially, critical thinking was predominantly viewed through the lens of discrete skills aimed at impartially evaluating information. Ennis (1962, 1987) asserts that critical thinking entails the meticulous assessment of statements, highlighting the acquisition of essential abilities necessary for such evaluation. This early conceptualisation, termed "pure skills" by Siegel (1988), reflects the technical dimensions of critical thinking, focusing solely on the mastery of skills without considering their practical application. While this perspective provided a foundational understanding, it often overlooks the contextual and situational factors that influence critical thinking processes.

Subsequent developments in critical thinking theory aimed to transcend this narrow viewpoint by considering individual facets and contextual factors. Paul (1982, 1984) introduces the concepts of weak and strong sense critical thinking, advocating for a more holistic approach that extended beyond mere skill acquisition. He emphasises the importance of engaging in argument networks and adopting dialectical approaches and the significance of embracing diverse perspectives and fostering dialogical exchanges. This marks a pivotal shift from the earlier emphasis on skills alone to a more comprehensive understanding of critical thinking as a multifaceted phenomenon deeply intertwined with the complexities of human cognition and

interaction. Nevertheless, this transition towards a broader conception of critical thinking was not devoid of challenges. Siegel (1988) raises concerns about the potential drawbacks of over-reliance on worldviews in critical discussions. This critique prompts the need for a more balanced approach that acknowledges the importance of diverse viewpoints while also recognising the limitations of subjective perspectives in fostering truly critical dialogue. As such, the evolution of critical thinking theory reflects an ongoing dialogue and refinement, characterised by a continual reassessment of underlying assumptions and a pursuit of a more nuanced understanding of the critical thinking process within educational contexts.

McPeck's (1981) critique of traditional conceptions of critical thinking serves as a significant challenge to prevailing notions. By questioning the notion of generalisable critical thinking skills, McPeck advocates for a paradigm shift towards a subject-specific approach and argues that critical thinking cannot be divorced from a deep contextual understanding of the subject matter under consideration. This perspective reveals the complex relationship between critical thinking and domain-specific knowledge. McPeck's argument challenges the prevailing idea of critical thinking as a universally applicable skill set, highlighting the necessity for critical thinkers to engage deeply with the particularities of the topics they analyse. This perspective suggests that effective critical thinking entails not only a mastery of generic analytical skills but also a profound comprehension of the subject's underlying principles and contexts.

Despite the ongoing debates spurred by McPeck's critique, scholars have continued to stress the importance of cultivating specific dispositions in aspiring critical thinkers. Bailin and Siegel (2007) draw attention to the significance of nurturing dispositions that value sound reasoning and encourage the active pursuit of justifiable explanations. Their work underscores the interplay between cognitive skills, emotional attitudes, and ethical values in fostering a truly critical mindset. Moreover, critical thinking has often been closely associated with the concept of rationality, characterised by the systematic evaluation of reasons and the rigorous justification of claims and actions. However, the concept of rationality presents its own set of challenges, particularly concerning the establishment of criteria for determining the validity of reasoning and the standards of acceptability. This highlights the inherent complexity and ongoing evolution of the concept of critical thinking, which necessitates continuous scrutiny and refinement in light of emerging insights and perspectives in the field.

Overall, critical thinking remains a dynamic and evolving concept which is intricately linked to cognitive processes, rationality, and reasoning. The distinction between generalisable aspects and subject-specific components reveals the complexity of the phenomenon and the ongoing debates surrounding its nature and application. Recognising the interconnectedness of general critical thinking courses and disciplinary studies, scholars advocate for a more holistic

approach that integrates both perspectives. In light of these discussions, the concept of criticality emerges as a more suitable framework for the present study, which offers a deeper understanding of the nature of criticality within the context of higher education practice and disciplinary EAP with a focus on political science.

2.2 Criticality

Understanding the scope of criticality requires examining its earlier conceptualisation as critical thinking, a term that has been debated extensively without definitive conclusions. This study explores critical thinking as a foundational principle, rooted in the broader concept of criticality. To contribute to current understandings, this section discusses criticality in higher education, distinguishing it from but acknowledging its overlap with critical thinking. Scholars argue that critical thinking should transcend mere skills and abilities, aiming instead to foster a critical attitude towards society and societal engagement (Davies, 2015; Dunne, 2015). This chapter, therefore, seeks to clarify what criticality entails and how it enhances academic/disciplinary practices.

Some scholars defined critical thinking in light of these goals as:

the intellectually disciplined process of actively and skilfully conceptualising, applying, analysing, synthesising and/or evaluating information gathered from, or generalised by, observation, experience, reflection, reasoning or communication, as a guide to belief or action [or argument] (Scriven & Paul, 2001, p. 1).

This definition by Scriven and Paul illustrates a rigorous cognitive capacity necessary for tackling complex situations or topics. While being foundational, it represents an early attempt to conceptualise criticality in higher education. Criticality, however, encompasses broader dimensions beyond these cognitive processes. While some scholars distinguish critical thinking from criticality, these terms are often used interchangeably depending on context and underlying principles in the literature. In this study, "criticality" is employed to encompass critical thinking and broader conceptions.

To understand the juxtaposition of the two concepts, some scholars tend to differentiate critical thinking into a hierarchical order. Unlike the strong and weak-sense critical thinking initiated by Paul as discussed earlier, these two categories were introduced in new light: a weaker form of critical thinking which means "the ability to critique the logic of texts, to note inconsistencies and lack of clarity (Wallace, 2003, p. 27) and a stronger form which deals with social issues related to society, power, and ideology. To put this into perspective, scholars propose that criticality is:

the motivation to persuade, engage and act on the world and self through the operation of the mindful, analytical, evaluative, interpretive, reflective understanding of a body of relevant knowledge

mediated by assimilated experience of how the social and physical environment is structured

combined with a willingness and capacity to question and problematize shared perceptions of relevance and experience.

(Brumfit et al, 2005, p. 149)

There appears to be some definitional scope here. What Wallace (2003) suggests above likely defines critical thinking as the ability to critique information at hand, while criticality according to Brumfit et al. (2005) additionally includes the person (self) and the context (world) where critical practices occur. This shares some of the characteristics of “tendencies” or “dispositions,” but in a more elaborated and demanding manner. Simpson (2020) proposes a captivating definition of criticality, informed by critical theory as:

Criticality, understood as an adjective rather than a noun—through the suffix *ality* means that the condition of being critical (i.e. Criticality) should be understood as a process in the making, a continuous process of becoming. Criticality cannot be a normative fixed or static state nor can the notion be an ‘end’ in itself” (p. 4).

The fact that criticality is and should be perceived as an ongoing process resonates with the key objective of the present study in which its nature requires further scrutiny. Simpson’s definition shows that the business of criticality practices, in essence, is the fact that the information, truths, or facts remain open for further discussions and for being challenged. I scrutinise the notion of criticality further by drawing on Barnett’s prominent conception of “critical being” (1997) that lays the foundation for criticality and is closely associated with higher education (Johnston et al., 2011).

Barnett (1997) criticises the traditional approach to critical thinking, arguing that it has been confined to the realm of formal knowledge acquisition, excluding broader dimensions such as “critical self-reflection and critical action” required for navigating the modern world (p. 63). Barnett also suggests that the purposes of critical thinking are missing from the discussion, so we should place greater emphasis on “What is it for?” rather than simply “What is critical thinking?” (p. 65).

Table 2.1

Levels, domains and forms of critical beings (Barnett, 1997, p. 103)

Levels of criticality		Domains		
		Knowledge	Self	World
4	Transformatory critique	Knowledge critique	Reconstruction of self	Critique-in-action (collective reconstruction of the world)
3	Refashioning of traditions	Critical thought (malleable traditions of thoughts)	Development of self	Mutual understanding and development of traditions
2	Reflexivity	Critical thinking (reflection on one's understanding)	Self-reflection (reflection on one's own project)	Reflective practice ('metacompetence', 'adaptability', 'flexibility')
1	Critical Skills	Discipline-specific critical thinking skills	Self-monitoring to given standards and norms	Problem-solving (means-end instrumentalism)
	Form of criticality	Critical reason	Critical self-reflection	Critical action

Barnett's conception of criticality encompasses three forms that align with the domains of critical thinking: knowledge, self, and world (Table 2.1). Additionally, criticality involves four hierarchical levels of critical skills—discipline-specific critical thinking skills and reflexivity—that reflect upon these domains. Barnett (1997) contends that critical thinking primarily appears in the knowledge domain, specifically as critical reason, focusing on understanding within a discipline. He argues that critical thought, seen as a higher level of criticality, involves openness to debates and alternative practices within a field, aiming for genuine enlightenment by revealing hidden forces at work. Barnett further distinguishes critique or metacritique as the highest level of criticality, involving reflection on fundamental concepts and societal functions of thought, which originates from critical theory's social criticism (Simpson, 2020). This distinction underscores a significant contrast between critical thinking and the broader concept of criticality.

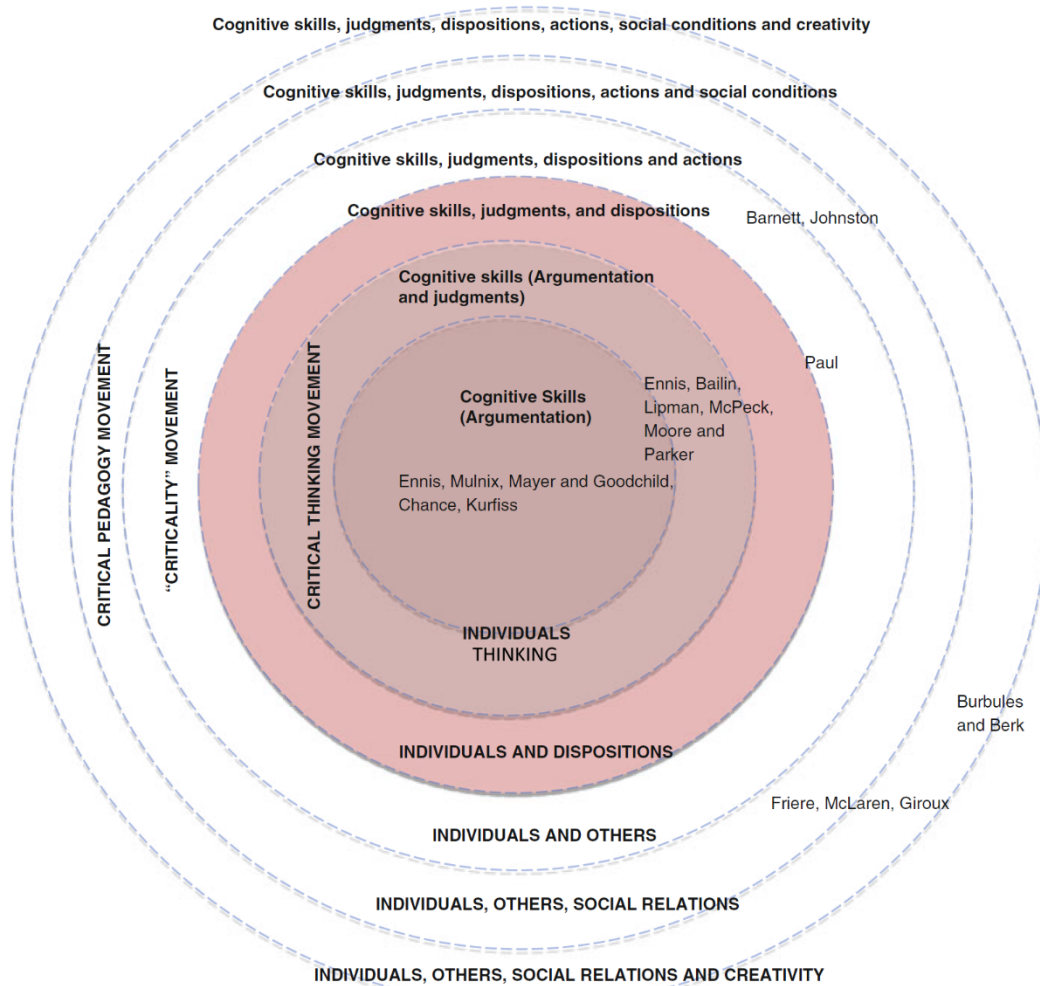
The critical being conception, from a definitional standpoint, appears to show where critical thinking and criticality overlaps, differs, and importantly how criticality has become broader and multi-level. Barnett (1997) refers to the goal of "construing and practising an adequate form of critical higher education" (p. 75), and his advocacy of taking the domain of self and world into consideration is clear. This seems to justify the rationale behind the levels of criticality as Barnett encapsulates:

Criticality spreads across the table, as it were. But, I shall argue, these developments are in danger of being arrested at the lower levels of criticality. As a result, we are ending up with a higher education that falls short of its potential to assist the constructive reshaping of our world (p. 76).

This unique lens to criticality offers an opportunity to delve further into the realm of higher education and the trajectories of its current usage and development. Davies' (2015) model of critical thinking in higher education breaks down growing elements of critical thinking and shows where criticality potentially comes into play. Such complex, hierarchical conception of criticality is also evident in this current scholarship in education.

Figure 2.1

A model of critical thinking in higher education (Davies, 2015, p. 85)



Echoing Barnett's critical being, criticality "attempts to provide an ambitious perspective of the concept of critical thinking incorporating argument, judgement/reflection, and critical action," extending beyond the individual boundary and incorporating "a composite of – three things: thinking, reflecting, and acting" (Davies, 2015, p. 65). This proposition led to the development of a critical thinking model in higher education, depicted in Figure 2.1. The inner circles of the model represent the foundational work in the critical thinking movement (in shaded areas), while the expanding outer circles highlight the socio-cultural aspects that encompass the criticality movement. Davies (2015) uses dotted lines to indicate "a degree of permeability between each level" (p. 83). Regarding the criticality movement, Davies suggests that

The fourth circle is an intermediate stage constituting what I have referred to as the “criticality movement”, although this cause is fairly new, and is not identified as such in the literature. This is a group of scholars consisting mainly of higher education specialists interested in the wider ramifications of critical thinking in higher education, tertiary institutions, and society at large (p. 85).

The criticality movement in Davies' model is pertinent to this discussion in the present study. First, the model is consistent with Barnett's conception of critical being suggesting hierarchical levels of criticality, symbolised by the multi-layered circles in Davies's depiction. Second, the model offers a comprehensive perspective on how criticality can be put into practice, particularly in higher education contexts, by integrating cognitive and individual components of critical thinking and expanding into socio-cultural dimensions. It's important to note that while critical pedagogy and creativity are part of this model, they may not be within the specific scope of the present study, yet they contribute to the broader understanding of where criticality stands in relation to these surrounding elements. This “fairly new” movement of criticality in HE, as Davies (2015) contends, prompts further exploration of the concept.

Criticality has been studied more recently in Salvi's (2020) practitioner-research. The study explores criticality among undergraduates in a pre-sessional English course, drawing on concepts from critical theory, critical pedagogy, and critical EAP. Through the pedagogy of autonomy, exploratory practice, and art-informed research, the study identifies three overarching themes of criticality: individual, interpersonal, and sociological-cultural dimensions.

Individual criticality encompasses reflection on one's own learning, metacognition, self-awareness, experiencing disruption in the face of difference and discovering new ways of seeing the world, exploring one's own questions, and asserting one's authority by developing one's autonomy and critical curiosity (p. 193).

The interpersonal dimension of criticality refers to the role of dialogue and interaction in exercising and developing criticality. (p. 193). ...Criticality is dialogue aimed at understanding rather than reaching agreement. This is why in critical practices it is so important to consider differing views. (p. 195).

The sociological and cultural dimension of criticality refers to sociocultural practices, discourses, and ways of being in and seeing the world. It involves becoming aware of different possibilities, questioning and resisting certain possibilities, and adapting to new possibilities (p. 195-196).

Interestingly, these dimensions parallel Barnett's conception of critical being, where individual criticality resembles Barnett's knowledge and self domains, while the interpersonal and sociocultural dimensions reflect aspects of the world domain. This alignment underscores the nature of criticality, suggesting a broad spectrum for further exploration, development, and understanding of criticality in HE.

In exploring criticality, concepts like Barnett's "transformatory critique" and Davies's "criticality movement" offer potential directions for researchers, teachers, and EAP practitioners in higher education. This study further explores criticality and its contextual practices within HE, including academic literacies and English for Academic Purposes to illuminate its disciplinary relevance.

2.3 Criticality, Academic Literacies, and EAP

As this chapter explores the concept of criticality in higher education (HE), it is essential to consider how English for Academic Purposes (EAP), as an integral part of HE, potentially influences and shapes the development of criticality and academic skills among students. This section examines the context of EAP to explore relevant concepts and practices within HE. The discussion then expands to the role of academic literacies and how these contribute to our understanding of criticality in this context.

English for Academic Purposes (EAP) has evolved significantly from its beginnings as language support for students entering academia. Now a well-established field within applied linguistics and English language teaching, EAP addresses new challenges and research enterprises. EAP is a prominent sub-field of English for Specific Purposes (ESP) (Charles, 2013; Hamp-Lyons, 2011; Paltridge & Starfield, 2013; Wette, 2018), focusing on helping students navigate academic and professional environments (Basturkmen, 2005). Despite shared characteristics, EAP specifically addresses the language and discourses of higher education. Hyland and Shaw (2016) describe EAP as a branch of applied linguistics, involving research into effective teaching, assessment, and analysis of academic texts and practices. The emphasis on "academic texts" and "textual practices" distinguishes EAP from ESP.

EAP is characterised by its focus on the "cognitive, social and linguistic demands of specific academic disciplines" (Hyland & Hamp-Lyons, 2002), especially for learners of English as a second or foreign language (Swales, 1990). It prides itself on theoretical and methodological eclecticism, where multiple beliefs and practices intersect (Hyland & Jiang, 2022). EAP's four principles—authenticity, groundedness, interdisciplinarity, and relevance—define its unique nature (Table 2.2). Authenticity ensures that materials and tasks reflect real-world academic

use. Groundedness links pedagogy with research, emphasising context analysis.

Interdisciplinarity allows EAP to draw from various theories and approaches to meet specific needs. Relevance ensures that teaching aligns with students' needs through needs analysis.

Table 2.2

The four main principles of EAP (Hyland & Shaw, 2016, p. 3)

Concept	Gloss
Authenticity	Classroom texts and tasks should be as close to the real academic world as possible.
Groundedness	A commitment to link pedagogy and research. A research base underlines materials and instructional practices.
Interdisciplinarity	EAP is not itself a theory or a methodology but employs an eclectic range of theories and methods.
Relevance	Linguistics and contextual relevance is ensured through needs analysis.

These principles highlight that EAP is more than remedial language support; it is integral to preparing students for academic success. Implications for classroom practice include material design, text selection, and ensuring authenticity and relevance in diverse EAP contexts. Hyland and Shaw (2016) assert that considering student needs bridges perception and practice, underscoring the importance of research-based, authentic, and interdisciplinary approaches. Overall, many scholars contend that EAP has been, and should be, more than a remedial language support in higher education (Hyland & Hamp-Lyons, 2002; Hyland & Shaw, 2016). Implications from these principles can be observed in classroom practices and suggest potential research value such as the process of material design, text selection and the extent to which authenticity and relevance are justified in different EAP contexts.

In the 1990s, the field of EAP underwent a significant transformation as educators began to recognise the political and social implications of their work, prompting what Wette (2018) describes as the "social turn." This shift moved the focus from merely textual analysis to encompassing needs analysis within the "institutional and sociocultural contexts" of English teaching, thus challenging the previously pragmatic nature of EAP (Macallister, 2016). This transformation aimed not only to disrupt traditional teaching practices but also to explore the transformative potential of EAP within and beyond the classroom (Chun & Morgan, 2019).

Further discussions (Benesch, 1993; Pennycook, 1994, 1997b) expanded to address the ideological dimensions of education and question the assumed neutrality of classroom practices. Alastair Pennycook specifically criticised the lack of meaningful content construction in EAP and its overly pragmatic orientation, which often places practitioners in an uncritical position regarding academic content. This approach, Pennycook argues, prioritises linguistic

forms over the personal, contextual, or cultural aspects, thus limiting the broader educational implications and transformative potential of EAP teaching.

This shift has reshaped EAP, emphasising that academic English differs significantly in cognitive terms across genres, writing stages, and disciplines compared to everyday usage (Hyland & Shaw, 2016). It has also prompted EAP to broaden its scope, considering broader political and cultural questions (Basturkmen, 2005). This includes questioning existing academic standards, norms, and practices, and reexamining the role of EAP in promoting critical engagement and resistance (Clark, 1992; Benesch, 2001). The urge to extend beyond achieving course objectives to wider, socio-political phenomena outside the classroom, as I would argue, has a strong association to political science, its nature of inquiry, and implications for criticality. Also, the move from passive acceptance to challenging the status quo in an EAP classroom has wider implications for teaching and learning of English, especially the move beyond understanding language as a neutral entity (e.g., Clark, 1992, Pennycook, 1997b, Benesch, 2001).

Such critical turn in EAP has led to the emergence of Critical EAP (CEAP). CEAP challenges the neutrality in language teaching by acknowledging that "teachers' decisions about subject matter, teaching methods, and assessment reflect a range of political positions" (Benesch, 1993, p. 707). Benesch positions CEAP as broadening academic purposes to include sociopolitical contexts and hierarchical arrangements within educational settings (Benesch, 2009). CEAP advances traditional teaching by revealing how ideology shapes education, thereby fostering critical dissent (Fenton-Smith, 2014). Despite its departure from traditional EAP, CEAP has gained recognition in applied linguistics, rooted in shared theoretical assumptions (Benesch, 2012). Macallister (2016) encapsulates CEAP's impact by encouraging educators and administrators to critically reflect on their practices, potentially leading to transformative changes in EAP pedagogy. This approach not only challenges conventional norms but also enables students to critically analyse EAP materials (Benesch, 2001).

Earlier EAP research focused on EFL students navigating academic language without addressing its sociopolitical implications (Starfield, 2013). In contrast, Swales et al. (2001) respond by critiquing the portrayal of international students in a US architecture program, advocating for critical pedagogical approaches that enhance language awareness through tailored strategies. This paradigm shift emphasises content interaction over language acquisition in EAP, fostering practitioner self-awareness and aligning with ESP goals of developing strategic competence and critical awareness (Basturkmen, 2005). These advancements signify pivotal milestones in EAP, setting the stage for integrating critical thinking and sociopolitical dimensions into EAP instruction.

This critical turn in EAP unveils a significant shift from traditional language proficiency-focused approaches to a more critical framework that integrates sociopolitical awareness. By placing language learning within broader cultural and ideological contexts, this transformation not only reshapes EAP but also enhances students' ability to engage critically with academic discourse. Relevant to the present study, this shift provides insights into how language instruction intertwined with critical pedagogies can effectively nurture criticality. This perspective is vital for understanding how EAP can be leveraged to equip students not only with academic linguistic competencies but also with the skills to question and actively participate in their educational environments within political science.

2.3.1 Impact of Academic Literacies on Fostering Criticality in Disciplinary EAP Context

Because EAP focuses on developing academic language and communication skills tailored to specific disciplinary needs, it is crucial for understanding criticality as defined and construed by academic literacies and within disciplines like political science. Academic literacies explore the relationship between linguistic conventions and knowledge production in academia, and have influenced academic writing theory, including EAP (Lillis & Tuck, 2016). The focus on specific linguistic demands of academic success connects EAP with academic literacies in which students master relevant language and literacy skills that meet the academic expectations in their disciplines (Hyland, 2006). Viewing reading and writing as social practices, academic literacies describe literacy practices within disciplinary contexts (Lea & Street, 2006; Bloome et al., 2018). Bloome et al. (2018) contend that we underscore

how people (teachers and students) use both spoken and written language to promote socialization to the culture of the academic community (to its ways of thinking, valuing, acting, believing, and feeling) and how engagement in the social practices, activities, and events of the community socializes people to the literacy practices of the community (p. 891).

Academic literacy, as it was previously referred to, emerged from the practice of reading and writing in academic contexts. The term 'literacy' is later pluralised as 'literacies' in current literature to address "the whole complex set of skills, not only those relating to reading and writing" (Hamp-Lyons, 2011, p. 98).

From an academic literacies perspective, there is a strong orientation towards English for Academic Purposes (EAP), with both fields sharing motivations to enhance students' academic reading and writing skills (Lillis & Tuck, 2016). Lea and Street (1998) advocate for the academic literacies approach and emphasise its implications for diverse aspects of academic writing and

challenging a uniform view of higher education writing practices. This perspective points to the influence of social and cultural backgrounds on academic writing pedagogy (Lea & Street, 1998; Hyland, 2006). However, differences between EAP and academic literacies are notable; EAP typically focuses on texts, whereas academic literacies often emphasise the role of the producer or meaning-maker (Lillis & Tuck, 2016). Additionally, while EAP views English as a stable linguistic resource, academic literacies critique the notion of English as a single standard, highlighting its variability across contexts (Lillis & Tuck, 2016). Moreover, academic literacies also introduce critical literacies, which challenge the neutrality of academic discourse, emphasising the ideological dimensions of writing (Lea & Street, 1998). This perspective encourages critical engagement with texts and supports the development of well-structured, evidence-based arguments in academic settings (Hyland, 2006; Wallace, 2003; Luke, 2004).

What could this mean for criticality? Criticality seems to manifest differently across educational settings, reflecting its versatility and applicability. To illustrate, in art and photography education (Gimenez & Thomas, 2015), criticality involves visual analysis and alternative perspectives, whereas in nursing, it focuses on analytical evaluation of professional scenarios, incorporating cultural and professional considerations. These examples underscore how criticality fosters reflective and evaluative thinking across disciplines.

Within language teaching, Tuzlukova et al. (2017) emphasise the pivotal role of critical thinking in enhancing student success and employability. Despite recognition of its importance, teachers face challenges in interpreting and applying critical thinking in the English language classroom, revealing a need for targeted professional development. This gap underscores the necessity for further research and development in critical thinking pedagogy to align educational practices with modern language learning demands. Furthermore, integrating critical thinking into EAP presents challenges influenced by local contexts. Gunawardena and Petraki (2014) contend that in Sri Lanka cultural norms and varying language proficiency levels pose obstacles to effective integration. This echoes findings by Hyland & Hamp-Lyons (2002) that emphasise the contextual nature of educational practices in EAP, where local factors significantly impact the development of critical thinking skills.

Building on the broader discussion of criticality across educational contexts, the role of academic literacies becomes particularly significant in disciplines like political science. According to Clarence and McKenna (2017), political science involves the study of power, governance, and political systems, and requires students to engage with complex theories, concepts, and texts (further discussion about political science in the next section). Academic literacies within the discipline, therefore, focus on developing students' ability to critically

analyse and evaluate political issues, theories, and arguments. This involves not only understanding the content and concepts of political science, but also being able to think critically about the underlying assumptions, biases, and implications of different perspectives. It also involves developing students' skills in argumentation, evidence-based reasoning, and the ability to construct and defend their own arguments.

Academic literacies intersecting with EAP play a crucial role in fostering criticality across educational contexts. This intersection leads to mastering disciplinary language while fostering awareness of power dynamics and ideological influences in academic discourse. Examining EAP's evolution and its critical turn reveals its intersection with socio-political issues in higher education. Academic literacies underscore the importance of critically engaging with academic discourse and developing argumentation skills, positioning EAP as pivotal in fostering critical thinking and empowering students to engage meaningfully with societal concerns. However, while studies highlight the diverse manifestations of criticality in art, nursing, and EAP settings respectively (Gunawardena & Petraki, 2014; Gimenez & Thomas, 2015; Tuzlukova et al., 2017), they also reveal significant challenges. These include varying interpretations and implementations of critical thinking, influenced by cultural norms and local educational practices. Such complexities suggest a critical gap: the need for a more nuanced understanding of how academic literacies and EAP practices can effectively cultivate critical thinking within specific disciplinary contexts, such as political science.

Importantly, by considering the knowledge structure of the discipline, this enables “the ability of academic literacies development work to make sense of the ways in which practices of the academy emerge from the nature of specific disciplines” (Clarence & McKenna, 2017, p. 46). This sets the stage for deeper exploration into how these EAP conceptions inform our understanding of criticality by bridging language education with broader societal issues. By integrating these insights, how criticality is cultivated within disciplines like political science is explored in the next section.

2.4 Criticality and Political Science Education

The present study focuses on the nature of criticality development through argumentation in an EAP for political science class. It is imperative to understand disciplinary thinking and practices and the extent to which, if at all, they relate to criticality. In political science, the reference to “critical thinking” is dominant in the literature compared to “criticality.” However, as I argue earlier, the application of the concept shares a lot of common grounds, and thus in this section the concept of criticality is mostly referred to as critical thinking to reflect its actual use in the discipline.

To understand how criticality works in political science, it is important to note that, from a specifist perspective, there are field-specific ways of thinking that shape the field and knowledge building within the field itself. Elder and Paul (2006, as cited in Johnston et al., 2011) illuminate how this disciplinary thinking could play out in different fields of study:

people have to learn to identify its elemental structures, which are: the purpose of the thinking; the viewpoint of the thinker; the assumption underlying the thinking; the implications of the reasoning; the information needed to support the thinking; related inferences and conclusions; underlying concepts and theories; and key questions to be answered (p. 29).

Such field-specific nature of thinking more or less has a role to play and consequently influences how each field understands the meaning of ‘critical’. And political science is no exception. With regard to the nature of knowledge acquisition in political science and its relevant sub-fields, critical thinking plays a central role in a sense that:

students are asked to use critical thinking to assess governance practices, public policy decisions, and individual and societal political beliefs, among other topics (Marks, 2008), applying these critical thinking skills to real-world political events (Oslen & Statham, 2005).

(as cited in Berdahl et al., 2021, p. 911).

Critical thinking in political science appears to fundamentally revolve around the concept of rationality such as reasoning and making valid arguments following ‘informal logic.’ The focus is on the application of “deductive and inductive reasoning” to “real social problems,” as opposed to the use of formal logic by philosophers or logicians (Weixing, 1997, p. 84). Therefore, to foster critical thinking skills, students of political science must:

1. possess background knowledge required for identifying issues;
2. be able to distinguish fact from opinion;
3. generate initially plausible hypotheses regarding issues;
4. develop procedures to test hypotheses and set criteria for confirming or rejecting them;
5. articulate arguments from the results of testing
6. determine cause-and-effect relationships;
7. determine the accuracy and completeness of information used;
8. identify logical fallacies and faulty reasoning;
9. compare and contrast information and points of view.

(Weixing, 1997, p. 84-85).

These abilities reflect the expectation for students to engage critically in political science, with rational thinking recognised as an essential component of critical thinking. Students are required to critically assess information, usually real-world cases, at hand, draw on relevant (political) theories, and support their arguments with logical reasoning. The development of critical thinking skills in political science is also essential for students to become active and engaged citizens. Clarence and McKenna (2017) contend that political science equips students with the tools to critically analyse political events, policies, and institutions, and to understand the complexities of power dynamics and decision-making processes. Students, therefore, should be able to question and challenge existing political structures and ideologies, and to engage in informed and constructive political discourse.

According to Marks (2008), the role of critical thinking skills is considered a key teaching strategy in political science as it can help reduce personal political beliefs, while allowing students to “work in favor of methods of inquiry and keep all options open,” and be “better equipped to solve real-world political problems when they choose to do so” (p. 214). This is also endorsed by Finlayson (2004):

political science seeks objects of analysis and modes of explanation that emphasize entrenched interests, hidden instrumental agendas and conventional pressures over and above the influence of ideas (conscious or otherwise) and their employment by political actors (p. 541).

Furthermore, Clarence (2014) echoes the impact of understanding disciplinary practice. This study critically examines the pedagogical practices within political science and law through the lens of Legitimation Code Theory (LCT). It challenges the prevailing emphasis in higher education on the social aspects of learning, arguing that this focus often obscures a deeper understanding of knowledge itself. The study reveals several key insights about political science and its implications for critical thinking. Firstly, political science is identified as a “knower code” rather than a knowledge code. In this view, success in the discipline depends not just on mastering specific content but on becoming a specialised knower, whose abilities in critical thinking, argumentation, communication, and related skills are essential for navigating the discipline. The “knower code” of political science shapes the kinds of critical thinking, reading, writing, and communication students engage in, as these are integral to their development as specialised knowers. Secondly, while there exists a foundational body of knowledge, the focus is on cultivating these knower codes, enabling students to think critically and engage with the discipline’s theoretical concepts in meaningful ways. Thirdly, the critique of pedagogical approaches highlights a tendency to prioritise breadth over depth in teaching theoretical concepts, which may hinder students' ability to apply knowledge effectively. Lastly, to foster

deeper critical thinking, Clarence (2014) recommends integrating disciplinary knowledge more prominently into teaching practices, providing explicit guidance on applying theoretical concepts across various contexts. This approach not only supports cumulative learning but also ensures that students are equipped to engage critically within the complexities of political science's disciplinary norms and practices.

In a case study by Berdahl et al. (2021), second-year political science students participated in sessions aimed at teaching explicit critical thinking skills. The study utilised the Association of American College and Universities (AACU) VALUE rubric to assess critical thinking, focusing on aspects such as issue explanation, evidence evaluation, contextual influences, student perspectives, and implications. The research found significant increases in students' self-evaluated critical thinking abilities post-intervention. While highlighting the importance of explicit critical thinking instruction, the study underscores its relevance in political science education. However, it acknowledges the reliance on self-assessment surveys, prompting this study to explore criticality further through analysis of classroom dialogues and argumentative essays.

Overall, the impact of critical thinking and criticality in political science has been eminent-yet-inconclusive. Not only does this contribute to the rationale behind the investigation of criticality in political science, it also implies that there are certain forms of criticality which benefit and better suit the needs of the discipline. In the next section, I shall conclude this chapter by discussing how criticality, informed by the discipline-specific nature of political science, is framed in this present study.

2.5 Toward the Field-specific Framework for Criticality in Higher Education

“Field-specific differences relate to what is understood to be the body of relevant knowledge; to what is accepted as mindful, analytical, evaluative, interpretive and reflective understanding of it; and to perceptions of how the social and perhaps physical environment is structured.”

(Johnston, Mitchell, Myles, & Ford, 2011, p. 72)

It has been evident that criticality spans across various fields but is perceived and valued uniquely within specific disciplines. The earlier sections highlighted the intersection of criticality with political science, leaving room for further exploration and understanding. First of all, Barnett's concept of 'critical being' (1997) is pivotal, expanding critical thinking beyond mere skills to encompass diverse domains and levels. His work is seminal in defining criticality within

higher education. However, to deepen our understanding in political science, contextualising Barnett's framework is essential for studying criticality within this specific field.

In order to take the field-specific nature of knowledge acquisition into account, the following should be taken into consideration:

- the nature of organising concepts and logical structure;
- the truth criteria used and claims made;
- the nature of knowledge; its growth and specific knowledge base;
- the underlying aims and major cognitive purpose;
- the particular nature of key intellectual skills, the enquiry methods employed;
- the representation of knowledge;
- the nature of teaching, learning and assessment;
- values and ethical codes; and
- social and cultural characteristics (including intra- and inter- disciplinary relationships)

(Johnston et al., 2011, p. 30-31).

The discussion above suggests that understanding critical thinking within specific fields requires sensitivity to how it is shaped by disciplinary knowledge. Johnston et al. (2011), building on Barnett's concept of critical being, propose that criticality involves critical thinking, self-reflection, and action, emphasising that meanings are influenced by overarching agendas and constituencies within higher education. They critique Barnett for speculating on criticality's uses rather than detailing its structure, components, or empirical evidence in undergraduate contexts, and for neglecting disciplinary differences and developmental paths.

Johnston et al. (2011) put forward a developmental framework for criticality in the social sciences and humanities (Table 2.3), which considers differing "truth criteria" between hard and soft fields (Donald, 1986, as cited in Johnston et al., 2011, p. 32). This framework, derived from a two-year study at a UK university involving Modern Languages (literature, history, linguistics, film, and language) and Social Work Studies (sociology, social policy, statistics, and social work), integrates observations, student and staff interviews, and document analysis. It aims to describe criticality development across these fields, with implications for disciplines like political science within the social sciences.

Using Johnston et al.'s (2011) model as a conceptual framework, the present study frames criticality as procedural and developmental, as opposed to a static state.

Figure 2.2

A developmental framework for criticality in the social sciences and humanities (Johnston et al., 2011)

		Level of criticality		
		Early criticality	Guided criticality	Late criticality
		1. Tenuous engagement with and control over strategies and knowledge	1. More secure control over strategies and knowledge	1. Mastery over strategies and knowledge
		2. Working within understandings of others	2. Partial challenges to the understandings of others	2. Where appropriate able to challenge orthodoxies
Entry into the critical process	1. Nature and degree of engagement with critical tasks	Active engagement with critical tasks, but other people shape tasks	More active engagement e.g. in understanding purpose of tasks, but within others' understandings	Engages in critical tasks in terms of own understandings
	2. Control over definition of topic, question and action	Works within other people's questions and conceptions of possible actions	Some ability to pose own minor questions and limited autonomy of action	Locates/defines significant problems and actions
Solution-searching process	1. Information location and management	Locates and manages information with guidance	Minimal guidance required	Locates and manages information independently
	2. Use of explanatory frameworks/theory	Uses explanatory frameworks in limited aspects only	Contrasts, synthesizes and integrates theory, limited challenges	Challenges and constructs explanatory frameworks
	3. Use of data / evidence / other voices in the field	Tentative recognition and use of evidence and organising concepts	More confident use of evidence and organising concepts, but within recognised parameters	Challenges principles and frameworks of evidence
	4. Linking between domains of formal knowledge and/or the self and/or action	Limited ability to link between domains	More confident linking, some pushing of boundaries	Makes links creatively and confidently, redefines understandings and actions
	5. Reflection (on formal knowledge, self and action)	Limited reflection on e.g. immediate competence	Reflection on thoughts, self and action, including underlying purposes	Extensive reflection on thoughts, actions and self, including underlying direction and values
	6. Constructing a case (process)	Building of a case uncertain, limited skills and understanding of purposes	More control over case construction, some autonomy	Challenges and shapes rules of case representation where appropriate
Rationale building	Representation of the case/of knowledge (spoken and/or written)	Tenuous, emerging control over forms of representation	Control over rules of representation, ability to build rationale, some pushing at boundaries of established practice	Challenges and shapes rules of case representation where appropriate
Understanding of territory, including power relationships	Understanding of territory, including power relationships	Locating legitimacy, authority and rules for action	More confident working within established power relationships and some challenges to status quo	Engagement as active protagonist, ability to reshape the rules of action

The framework encompasses three broad and overlapping levels of criticality development: *Early, guided, and late criticality*. These levels denote varying degrees of engagement with critical strategies and knowledge, progressing from tentative control to mastery where individuals can challenge orthodoxies within their own terms:

- *Early criticality*: where there is a tenuous engagement with and control over critical strategies and knowledge, largely within terms of others' understandings and actions.
- *Guided criticality*: where there is more secure control over critical strategies and knowledge and partial challenges at times to existing understandings and actions of others.
- *Late criticality*: where there is mastery over critical strategies and knowledge and, where appropriate, the person can easily challenge orthodoxies within terms of their own understandings (Johnston et al., 2011, p. 82).

The framework emphasises the developmental nature of criticality, acknowledging that even early stages represent significant progress in fostering critical thinking abilities. Importantly, Johnston et al. (2011) base their framework on longitudinal empirical data, highlighting the contextual nature and resources necessary for criticality to manifest effectively within HE.

Regarding the four aspects of criticality—entry into the critical process, solution searching, rationale building, and understanding of territory—Johnston et al. (2011) draw from Walvoord and McCarthy (1990) to explore how these aspects contribute to the development of critical thinking. These aspects, along with their sub-aspects, provide a comprehensive lens for understanding criticality's evolution. The framework also integrates both processes (e.g., reflection, discussion) and products (e.g., written arguments), underscoring their role in empirical evidence within higher education contexts. Such duo foci are instrumental to how the present study sets to inquire into empirical evidence in the classroom:

...in the higher education context, students will read about theories and concepts, listen to others talking about them, reflect on the information, perhaps deconstruct and reconstruct the information through devices such as informal discussion or notes (all processes), and later perhaps present or write about those theories (products)

(Johnston et al., 2011, p. 83).

The present study, therefore, draws upon Johnston et al.'s (2011) framework that guides the investigation and understanding of criticality development in EAP for political science. While this study does not trace the progression of criticality over time, the framework provides a lens to identify and situate the levels of criticality demonstrated by students within the scope of this

research. It also recognises the challenges and implications of expecting transformative levels of criticality from undergraduate students, suggesting that effective functioning in everyday circumstances often aligns with intermediate levels of criticality. Therefore, this field-specific approach to criticality in the social sciences and humanities offers a contextualised perspective for understanding the nature of criticality development within political science.

2.6 Summary and Conclusion

The exploration of criticality within various disciplinary contexts, particularly political science, stresses the necessity of contextualising critical thinking skills to align with the specific demands and challenges inherent in each field. This field-specific approach provides valuable insights for the effective cultivation of criticality within political science education (Johnston et al., 2011; Finlayson, 2004; Clarence & McKenna, 2017). By recognising and addressing the nature of inquiry in political science, such as the need for rational argumentation, hypothesis testing, and the ability to distinguish fact from opinion, educators can better equip students to engage critically with real-world political events. The implications of this approach extend to enhancing problem-solving abilities and reducing personal biases, fostering a more informed and analytical student body.

The developmental framework proposed by Johnston et al. (2011) provides a comprehensive model for understanding and nurturing criticality in higher education, emphasising the role of disciplinary knowledge and the continuum of criticality trajectories among students. This framework identifies three levels of criticality—*early*, *guided*, and *late*—each reflecting different degrees of engagement with critical strategies and knowledge. *Early criticality* involves limited control over strategies, primarily relying on others' understandings. *Guided criticality* shows more secure control and partial challenges to existing ideas. *Late criticality* denotes mastery, where individuals confidently challenge established orthodoxies. The development of criticality progresses through stages of entry into the critical process, solution searching, rationale building, and understanding of territory, each fostering deeper analytical and evaluative skills. Integrating this framework with academic literacies and EAP addresses the sociopolitical dimensions of education which advocates for an approach that challenges the neutrality of language teaching and promotes critical engagement.

This understanding of criticality lays a foundation for specific exploration into argumentation's role in fostering criticality among students. By examining the nature of argumentation, the subsequent chapter will explore the centrality of argumentation in fostering criticality and the extent to which they are interconnected.

Chapter 3 Argumentation

*“The elementary principle behind all argumentative thinking and speaking is this:
Whenever you make an assertion or advance any proposition which you wish others to accept,
couple that idea with evidence sufficiently complete to convince “beyond a reasonable doubt.”
Because people have their prejudices and individual points of view,
it is often necessary to justify to others what to you seems obvious.”*

Craig Baird (1950, p. 90)

In the previous chapter, argumentation emerged as a critical component intertwined with both criticality and the field of political science, facilitating the articulation of ideas, claims, and justifications across diverse perspectives. From an applied linguistic standpoint, argumentation serves as a bridge between language and social practices, particularly within the context of disciplinary EAP. It enables students and educators to navigate rhetorical strategies and disciplinary knowledge, engaging deeply in discussions on societal issues and enhancing understanding through the formulation of evidence-supported arguments in essays.

This chapter explores foundational theories and research on argumentation, drawing from philosophical and logical origins to contemporary genre and discourse perspectives. Central to this exploration is Toulmin’s model, a structured framework for evaluating well-argued propositions, robust supporting evidence, and the structural components of effective arguments. The discussion also considers how argumentation varies across disciplines from generic skills to discipline-specific focuses. Furthermore, the chapter examines the role of discourse communities and epistemological knowledge, particularly within social sciences, in shaping argumentation practices. It discusses the functional approach rooted in systemic functional linguistics (SFL), which underscores the complexity and criticality of argumentative elements, especially within interpersonal metafunctions. This chapter concludes by proposing the conceptual framework that theoretically guides the understanding and analysis of argumentation in the study.

This comprehensive overview sets the stage for exploring the intricate relationship between argumentation and criticality within the realm of political science and how argumentation is studied and applied in this study.

3.1 What is Argumentation?

Argumentation has long been a part of human communication which serves specific functions and purposes. Modern argumentation theory began to take shape in the 1950s, with notable

contributions from Toulmin (1958) and Perelman and Olbrechts-Tyteca (1969) (van Eemeren & Verheij, 2018). Van Eemeren and Grootendorst (1987) define argumentation as “an attempt to convince another person of one’s point of view” (p. 58), assuming the presence of opposing viewpoints and awareness of potential doubt and criticism. From a cognitive psychology perspective, Nickerson (2021) identifies two meanings of argument. The first connotes a verbal dispute where success is seen as prevailing over opponents, while the second refers to impartially reasoned support of a conclusion, aligning with a philosophical standpoint. Thus, argumentation is an attempt to address doubt and resolve disputes with others (van Eemeren & Grootendorst, 1987). This awareness of the differing viewpoints is echoed in van Eemeren & Verheij (2018):

Argumentation is a communicative and interactional act complex aimed at resolving a difference of opinion with the addressee by putting forward a constellation of propositions the arguer can be held accountable for to make the standpoint at issue acceptable to a rational judge who judges reasonably (p. 5).

This is similar to what Baird (1950) proclaims at the beginning of this chapter. The key ideas of argumentation based on these perspectives are that, due to multiple perspectives held, an argument thus needs to be “convinced” and “supported” with reasons and/or evidence. van Eemeren and Grootendorst (1987, p. 63) raise the following critical questions that provide analytical aspects to be considered:

1. With regard to which propositions is a positive or negative viewpoint adopted?
2. Which viewpoints are expected to be subject to doubt and consequently defended by means of argumentation?
3. What types of dispute form the main issue of the discourse, and of which non-mixed single disputes does it consist?
4. Who acts as protagonist towards the defended viewpoint, and who is antagonist?
5. Apart from the argumentation stage, how are the confrontation stage, opening stage, and closing stage represented?
6. From which points of the disputes is it evident that they have been settled in favour of protagonist or antagonist?

This approach to argumentation can be described as “descriptive and normative” (Andriessen & Baker, 2022, p. 429), the objective of which is to seek criteria for the evaluation of argumentation. Andriessen and Baker (2022) summarise this movement of argumentation as

dominated by scholars who focused on the logical, sequential structure of argument. In this tradition, a good argument was thought to have a certain type of structure, and

scholars attempted to specify the underlying “grammar” of argument by analogy with the syntax of a well-formed sentence (p. 430).

This can be a good starting point to understand argumentation from a specific perspective. It is important to identify underlying structures and, importantly, what constitutes a good structure. Hirvela (2013) emphasises the need to distinguish argumentation from “persuasion”, noting that while persuasion uses creative methods to convince, argumentation relies on logic, reasons, and evidence. Andrews (2010) supports this by stating that “[m]ost argument would hope to be persuasive, but not all persuasion is argumentative” (p. 39). This suggests that while some forms of argumentation are persuasive, they share features with persuasive writing. Hirvela (2021) categorises this as argument-persuasion, highlighting the need to distinguish it from other types of argumentation. Lunsford et al. (2019, as cited in Hirvela, 2021) describes this mixed type of argumentation as:

...the point of argument is to discover some version of truth, using evidence and reasons. Argument of this sort leads readers toward conviction, an agreement that a claim is true or reasonable or that a course of action is desirable. The aim of persuasion is to change a point of view or to move others from conviction to action. In other words, writers or speakers argue to find some truth; they persuade when they think they already know it (p. 7).

Fulkerson (1996, as cited in Hirvela, 2013) further illuminates, quite interestingly, that argument is not agreeing with one’s point of view but “mutual dialectical interchange through which, out of opposing yet simultaneously cooperating voices, wise decisions can be reached, decisions always subject to revision as better arguments and better evidence become available” (p. IX). To delve further into the core structures and elements of argumentation, one recognisable and influential work is that of Stephen E. Toulmin.

3.2 Toulmin’s Arguments in Logic and Philosophy

The study of argumentation is not new, and its development can be traced back to the study of logic and philosophy. Toulmin’s work is of critical importance to the understanding and analysis of arguments. In this first section, I discuss extensively the theories and conceptions from Toulmin’s perspective and the conceptual model of arguments. I conclude this section by discussing the ways in which the Toulmin’s model contributes to how I conceptualise and approach argumentation in the study.

Toulmin (1958, 2003) views an argument as an assertion leading to a claim, asserting that seriousness is inherent in such assertions. For an argument to be sound, it requires proof or

support, which determines its validity. Toulmin's central argument emphasises that assertions can be challenged, focusing on "justificatory arguments." He explains:

Suppose, then, that a man has made an assertion and has been challenged for his backing. The question now is: how does he set about producing an argument in defence of the original assertion, and what are the modes of criticism and assessment which are appropriate when we are considering the merits of the argument he presents? If we put this question forward in a completely general form, there is one thing which should strike us immediately: the great range of assertions for which backing can be produced, the many different sorts of thing which can be produced as backing for assertions, and accordingly the variety of the steps from the data to conclusions which may appear in the course of justificatory arguments
(Toulmin, 2003, p. 12).

Toulmin highlights the complexity of argumentation, particularly in how assertions can be challenged and defended using various forms of "backing" or data. This introduces key components of an argument—data, backing, and conclusion—which will be explored further. He also raises critical questions about how arguments are assessed, setting the stage for understanding different types of arguments and their evaluation:

It is the problem of deciding at what points and in what ways the manner in which we assess arguments may also be expected to vary—the question will be, what features of our assessment-procedure will be affected as we move from considering a step of one kind to considering one of another kind, and what features will remain the same regardless of the kind of step we are considering (ibid, p. 12).

3.2.1 The Toulminian Model

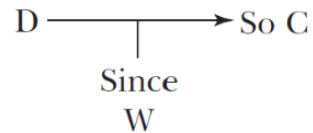
In writing, arguments can be broadly distinguished by different "phases," beginning with a problem statement and concluding with a proposed solution, which Toulmin (2003) calls "chief anatomical units" (p. 87). To deeply analyse an argument, one must also examine the sentence-level or "physiological level," (ibid, p. 87) where the finer structure is recognised and the validity of arguments is established. Toulmin emphasises the importance of both macro- and micro-level analyses, noting that "micro-arguments... need to be looked at from time to time with one eye on the macro-arguments in which they figure" (Toulmin, 2003, p. 87). Understanding these distinctions is essential for grasping specific arguments and their broader contexts.

The need to theorise key elements in arguments stems from the early, simple pattern of arguments: minor premise, major premise, and conclusion. Toulmin questions whether this

pattern sufficiently accounts for all elements in arguments based on the procedural nature of logic. To justify conclusions when initiating an argument, Toulmin proposes a streamlined model (Fig. 3.1) with three main components: data (D), warrant (W), and claim (C). To reach a claim in an argument, we draw on specific facts or data as a foundation. This is depicted by the arrow moving from (D) to (C).

Figure 3.1

Toulmin's first model of arguments (2003, p. 92)



However, further questions arise: What if our data is challenged? How can we ensure our claim is "an appropriate and legitimate one"? (Toulmin, 2003, p. 91). These questions reflect the need for a deeper understanding of the components and processes involved in constructing a sound argument. This is when warrant (W) is introduced as another supporting element to the data we appeal to. Warrants, according to Toulmin, serve as "general, hypothetical statements, which can act as bridges, and authorise the sort of step to which our particular argument commits us" (ibid, p. 91), and an accompanying example is provided to this specific model:

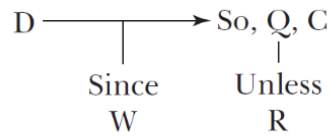
Data (D)		Harry was born in Bermuda
Warrant (W)	Since...	A man born in Bermuda will be a British subject
Claim (C)	So...	Harry is a British subject

It is important to distinguish between data and warrant. In Toulmin's example, if our argument is that Harry is a British subject, we support this claim with the fact that Harry was born in Bermuda. Here, the warrant relates to the legal right of nationality for someone born in Bermuda. This warrant is not directly about Harry but helps legitimise our claim. Thus, "data are appealed to explicitly, warrants implicitly" (Toulmin, 2003, p. 92).

While Toulmin's model captures key patterns in argumentation, it simplifies the complexity of the logical process. Supplementing a claim with a warrant is not always sufficient, as the warrant itself can be challenged and may need further elaboration. To address this, Toulmin introduces two additional key elements: the qualifier or modal qualifier (Q) and rebuttal (R). These elements provide a more comprehensive reflection of the argumentative process, accommodating the nuances and potential challenges to the argument (Fig. 3.2).

Figure 3.2

Toulmin's second model of arguments (2003, p. 94)



Toulmin discusses these elements together because, in many cases, the warrant can only verify the claim to a certain extent, necessitating further discussion of exceptions or possibilities. The qualifier (Q) acts as a modal to indicate the degree to which the data supports the claim, using terms like "presumably" and "probably," hence the term modal qualifiers. Both (Q) and (R) are connected. The qualifier shows the extent of the relationship between the data and the claim, while the rebuttal provides additional information explaining why the modal qualifier is appropriate. This structure allows for a more nuanced argument which accommodates potential challenges and elaborations. The example provided by Toulmin below could shed light on how modal qualifier and rebuttal function in argumentation:

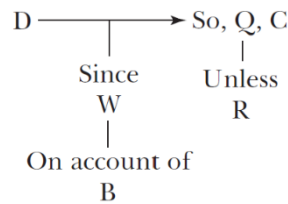
Data (D)		Harry was born in Bermuda
Warrant (W)	Since...	A man born in Bermuda will <i>generally</i> be a British subject
Qualifier (Q) + Claim (C)	So, <i>presumably</i>	Harry is a British subject
Rebuttal (R)	Unless	Both his parents were aliens/he has become a naturalised American/...

In this example, the use of "generally" in our warrant indicates some degree of force rather than an absolute condition. Since the warrant may not apply to all cases, we use a qualifier like "presumably" to reflect the tentativeness of our claim. Additionally, the rebuttal highlights specific conditions under which someone born in Bermuda might not be of British nationality.

The second model explains the degree of certainty in argumentation, moving beyond a black-or-white, dichotomous conclusion. The addition of the qualifier and rebuttal shows how an argument can be presented with an awareness of conditions and exceptions, adding complexity to the process. However, this model is still incomplete, as the final model reveals.

Figure 3.3

Toulmin's final model of arguments (2003, p. 97)



To integrate the last element into the model of argumentation, Toulmin revisits the data and warrant supporting our claim, acknowledging that the warrant can still be susceptible to criticism. Thus, Toulmin includes backing (B) for the warrant in his final model (Fig. 3.3), particularly when the warrant is strongly associated with another fact needing clarification. In this model, backing (B) is placed directly under the warrant.

Backing appears as “categorical statements of fact quite as well as can the data appealed to in direct support of our conclusions” (Toulmin, 2003, p. 98). This distinguishes backing from the warrant: while warrants bridge data and claim, backing serves as fact-like statements verifying the warrant. For instance, in the example "Harry was born in Bermuda, so he is a British subject" ($D \rightarrow C$), the warrant "A man born in Bermuda will generally be a British subject" may require backing. According to Toulmin's model, (W) and (B) are connected by the phrase "on the account of," and the backing could be relevant laws that prescribe this:

Data (D)		Harry was born in Bermuda
Warrant (W)	Since...	A man born in Bermuda will be a British subject
Backing (B)	on the account of...	The following statutes and other legal provisions
Qualifier (Q) + Claim (C)	So, presumably	Harry is a British subject
Rebuttal (R)	Unless	Both his parents were aliens/he has become a naturalised American/...

The warrant that someone born in Bermuda will be British is supported by relevant legal obligations or rights (in bold), “a straightforward statement of fact” (Toulmin, 2003, p. 98). To distinguish between data and backing, both based on facts, it is essential to understand their roles in argumentation:

Data of some kind must be produced, if there is to be an argument there at all: a bare conclusion, without any data produced in its support, is no argument. But the backing of the warrants we invoke need not be made explicit—at any rate to begin with: the warrants

may be conceded without challenge, and their backing left understood (Toulmin, 2003, p. 98).

Toulmin suggests that data serves as the fundamental fact or statement we appeal to in making our argument, giving rise to the claim and opening it for argument. Backing, however, is optional, as the warrant alone can sometimes validate the claim. If the claim and warrant are challenged, we can further appeal to the backing to justify our argument.

Toulmin (2003) clarifies that this final model of argumentation is not conclusive, yet it covers sufficient complexity of the fundamental elements for further analysis. The added elements in the final model are useful for analysing statements or discourses. This model is an effective tool for a more careful approach to assessing arguments, helping us to see beyond surface-level justifications. This is particularly useful for evaluating claims in students' arguments, such as discussions and argumentative essays. However, it is important to acknowledge that Toulmin's approach is not without its critics, and there are certain limitations to consider. These critiques will be addressed in the later section.

3.2.2 Types of Arguments

Even though the main purpose of an argument is perceived as “justificatory”, there appears to be different classifications in which the concept of “fields of arguments” emerged. This is central to the understanding of how argumentation might work across fields of study, particularly in social sciences, including political science. This section discusses largely from Toulmin's perspective, but I will also bring into the discussion some of the recent works in discipline-specific argumentation.

3.2.2.1 Field-invariant and Field-dependent Arguments

In logic, the idea of “fields” arises from the concern over the extent to which common “canons or standards” (Toulmin, 2003, p. 14) can be applied to assess justificatory arguments. Whether arguments fall into the same field depends on the “logical types” of how facts are used to reach conclusions. Arguments are theorised as either “field-invariant” or “field-dependent.” Toulmin does not detail these fields, but it can be inferred that there is a wide range of fields to consider when analysing arguments. His examples range from mathematical works, astronavigation, and biology to jurisprudence and simple claims like “Petersen is a Swede, so he is presumably not a Roman Catholic” (Toulmin, 2003, p. 14). This, at least, shows that logicians are aware of the variety of fields in argumentation, and within each field the same logical type can be applied:

What things about the modes in which we assess arguments, the standard by reference to which we assess them and the manner in which we qualify our conclusions about them,

are the same regardless of field (field-invariant), and which of them vary as we move from arguments in one field to arguments in another (field-dependent)?
(2003, p. 15).

Analysing arguments involves distinguishing between *field-invariant* and *field-dependent* types. *Field-invariant* arguments use logical types applicable across various disciplines, while *field-dependent* arguments are specific to particular fields. Toulmin (2003) provides a framework outlining common phases in argumentation that apply broadly, including an initiation phase for presenting issues, an elaboration phase for detailing evidence and reasoning, and a conclusion phase for articulating outcomes. This structure highlights universal aspects of argument construction. Moreover, further emphasising micro-level argumentation, Toulmin notes the importance of specific linguistic terms that shape arguments. Terms like "possible" and "necessary" have pivotal roles: "possible" suggests consideration and prompts detailed evaluation of evidence, while "necessary," often expressed with modals like "must," indicates a strong direction toward a conclusion. The distinction between the semantic force and the criteria of modal terms, such as the directive force of "cannot," shows the nuanced role of language in shaping arguments.

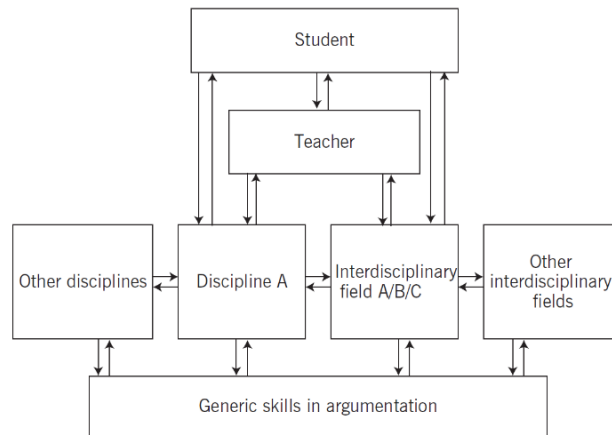
This examination of field-invariance, field-dependence, and the linguistic intricacies of argumentation provides a foundation for further exploring how arguments are conceptualised across different academic disciplines, particularly in political science. The next section will investigate these concepts within the context of higher education, focusing on the diverse disciplinary approaches to argumentation.

3.2.2.2 Discipline-specific Argumentation in Higher Education

In higher education, the focus on teaching argumentation recognises its importance in academic development. Discipline-specific argumentation is particularly valued for its relevance to students' fields of study, making it "more useful and apposite" (Andrews et al., 2010, p. 54). Andrews (2010) distinguishes between 'argument,' a broad concept encompassing various forms, and 'argumentation,' which refers to the process and sequences of arguments within specific contexts. In educational settings, argumentation involves understanding how arguments function across disciplines and fostering these skills effectively. Teachers act as crucial intermediaries, guiding students through the academic arguments relevant to their disciplines, as illustrated in Figure 3.4.

Figure 3.4

The relationship between generic and discipline-specific skills of argumentation (Andrews, 2010, p. 4)



In Andrews' framework, generic skills like critical and essay writing are identified at the diagram's base, linking to broader critical thinking abilities. While these skills are not detailed extensively, they are considered transferable across disciplines. Andrews (2010) emphasises the need for a balance between understanding these general argumentation skills and applying them specifically within different academic fields. The complexity of argumentation increases with the disciplinary and interdisciplinary nature of the subject matter. This suggests a rich area for further research into how these skills interact and contribute to educational outcomes.

To make more sense of the discipline-specific nature of argumentation within the higher education context and the figure above, initial findings from a study by Andrews et al. (2010) found that many first-year undergraduates believed that argument is important in their fields of study. They felt that they needed more explicit instruction and relied on their previously learned argumentation skills. Most students, however, lacked critical awareness of what they read and tended to accept the information presented to them. Importantly, the study suggested that the differences among universities, fields of study, and teachers all play a significant role in determining how argumentation practices work. Here, Andrews et al. (2010) contend that

[a]t institutional level, argumentation may be more prized, more a part of the fabric of intellectual inquiry at some universities than at others. ...[a]t a disciplinary level, ...it can be said that the differences in argumentational approach between the disciplines is a result of epistemological variation. What constitutes knowledge and how that knowledge is framed in the various disciplines is highly significant. If we translate the discussion to Toulminian terms, the *warrants* that enable us to connect claims (propositions) and *grounds* (evidence) vary from discipline to discipline (emphasis in original, p. 60).

This is quite illuminating, regarding the relationship between the role of institutional and disciplinary contexts and argumentation. The reference to Toulmin's *warrants* and *grounds* places particular emphasis on which elements we should perhaps pay more attention to when considering or assessing an argument within a disciplinary perspective.

Critics argue for several limitations of the Toulminian model (Wingate, 2012; Stapleton & Wu, 2015; Andriessen & Baker, 2022). Wingate (2012) notes that while effective for analysing and constructing single claims, the model struggles with larger, macro-level structures, suggesting a need for integration with other methods for comprehensive educational applications. Similarly, Stapleton and Wu (2015) critique the model's emphasis on surface structural elements, arguing that it may neglect logical coherence and the quality of evidence in arguments. Their study identified well-structured arguments with weak reasoning, noting shortcomings such as unrebutted counterarguments and misaligned internal logic. Andriessen and Baker (2022) further argue that the Toulminian model does not sufficiently capture the dynamics of practical argumentation, particularly in collaborative contexts where meaning-making is crucial.

Despite these criticisms, the Toulminian model remains valuable for evaluating the soundness of individual arguments, as affirmed by Andrews (2010), who regards it as robust for scrutinising the rational foundations of claims. The model alone, nevertheless, does not encapsulate the full complexity of argumentation, particularly within specific disciplines. Toulmin himself acknowledges that argument standards are inherently field-dependent, varying significantly across different areas. To address this, the study underscores the importance of moving beyond structural elements to evaluate the substantive quality of arguments in academic writing. This focus extends to critical features like appraisal in studying interpersonal aspects of discourse.

The next section will explore argumentation through alternative lenses, including functional and genre-based approaches. Halliday (1994) emphasises the need for a linguistic model that connects linguistic forms to their social contexts, proposing systemic functional linguistics and its associated functional grammar as solutions for examining how claims are linguistically structured.

3.3 A Genre-based Perspective on Argumentation

"A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognised by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constrains choice of content and style."

(Swales 1990: 58)

Genre is crucial in academic English, significantly impacting communicative purpose and educational outcomes. Swales (1990) highlights the risk of neglecting genre, noting that “ignoring genre is precisely the danger of ignoring communicative purpose” (p. 72).

Understanding academic genres and registers is essential for student success. Genres can be categorised across various domains—workplace, personal/social, academic, and civic (Macken-Horarik, 1996). In academic contexts, genre knowledge becomes particularly important, as academic genres evolve into more “technical and grammatically metaphorical” forms with education (Humphrey et al., 2010, p. 189).

Swales’ experience teaching an EAP course to law students reveals the importance of task design in genre teaching. Initially focusing on narrative comprehension, he realised after observing a Criminal Law class that legal education emphasised fact identification that revealed a misalignment in his approach. He concluded that understanding and teaching genre-specific strategies is crucial, as improper methods can hinder students. This aligns with Bruce’s (2008) genre-based approach, which emphasises that tasks exploring text organisation and features help learners produce genre-specific texts (p. 6). This section highlights how genre understanding enhances argumentation within an EAP curriculum and underscores the significance of genre awareness for academic success.

3.3.1 Discourse Community, Discourse Competence, Argumentation, and EAP

The notion of discourse community is important when discussing argumentation from a genre perspective in which a group of people shares some common linguistics practices to achieve certain purposes in their community. The notion of discourse community thus resonates with how argumentation, specifically argumentative essays, is practised. My main aim for discussing discourse community in this chapter is not to review extensively its backgrounds and developments, but to understand and better explain argumentation from this perspective.

Swales (1990) conceptualises discourse community based on six characteristics: A discourse community:

1. has broadly agreed set of common public goals,
2. has mechanisms of intercommunication among its members,
3. uses its participatory mechanisms primarily to provide information and feedback,
4. utilises and hence possesses one or more genre in the communicative furtherance of its aims,
5. has acquired some specific lexis, and
6. has a threshold level of members with a suitable degree of relevant content and discourse expertise

These characteristics of discourse community have implications for a view of genre, in particular, as social action (Miller, 1984) which escapes “narrow prescriptivism” and does not involve only “constructing a classification of genres” (Swales, 1990, p. 44). By drawing on the notion of discourse community, this study approaches the definition of a genre to understand argumentation better by considering what genre can contribute to the understanding of argumentation and its nature of development within a discipline. Swales provides a comprehensive definition of genre that underscores its importance in academic contexts:

A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the parent discourse community and thereby constitute a rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constraints choice of content and style. Communicative purpose is both a privileged criterion and one that operates to keep the scope of a genre as here conceived narrowly focused on comparable rhetorical action. In addition to purpose, exemplars of a genre exhibit various patterns of similarity in terms of structure, style, content and intended audience. If all high probability expectations are realized, the exemplar will be viewed as prototypical by the parent discourse community. The genre names inherited and produced by discourse communities and imported by other constitute valuable ethnographic communication, but typically need further validation.

(Swales, 1990, p. 58)

The present study recognises the various interpretations of genre but aligns with Swales's definition to approach argumentation as a genre within discipline-specific EAP contexts. This perspective views argumentation as shaped by its discourse community, providing insights into the rhetorical choices made by writers in their essays. These choices are considered socially situated acts within disciplinary or institutional contexts (Hyland, 2005a). This approach also explores discourse competence and discourse community within EAP, crucial for understanding and mastering academic writing skills. Discourse competence, as defined by Bruce (2008), involves integrating diverse knowledge types to produce coherent and cohesive written discourse, essential for effective argumentation. This competence draws upon models of communicative competence that highlights both content knowledge and language proficiency (Canale & Swain, 1980; Canale, 1983; Celce-Murcia & Dornyei, 1995).

For political science, this is rather obvious from the previous chapter that there is a strong connection between the field and criticality. From a discourse community standpoint, this connection has significant implications for academic practices and argumentation, particularly in how writers persuade within the discipline. Hyland (2011) proclaims that

At the heart of academic persuasion, then, are writers' attempts to anticipate possible negative reactions to their claims. To do this, they must display familiarity with the persuasive practices of their disciplines, encoding ideas, employing warrants, and framing arguments in ways that their potential audience will find most convincing. They also have to convey their credibility by establishing a professionally acceptable persona and an appropriate attitude, both to their readers and their arguments (Hyland, 2011, p. 195).

This underlines, if not necessitates, the functional aspects of argument analysis, which constitutes part of the research focus and methodology of the present study. This discussion of discourse competence now sets the stage for examining EAP as a community of practice, where concepts like discourse community and argumentation can be contextualised more meaningfully to enhance learning and application in academic settings.

In EAP practices, teaching, learning, materials, assessment, and students' written products form a community shaped by the specific discourses of academic disciplines. Hyland and Hamp-Lyons (2002) emphasise the integral role of the community concept in EAP, noting that discourse varies across communities with distinct practices, genres, and communicative conventions, including argument structures and social behaviours. This aligns with Hamp-Lyons' (2011) view of EAP's socio-cultural direction influenced by the discourse community concept.

Central to academic communities, Flowerdew (2019) emphasises the crucial role of EAP teachers in helping students master disciplinary language. Canagarajah (2002) also explores how local academic cultures vary in their focus on reading, oral communication, teaching, and community service, reflecting hybrid influences and diverse memberships. These local variations impact EAP practices, including syllabus design and classroom activities, requiring approaches to disciplinary texts that align with social and community concerns (Canagarajah, 2014). The diversity among EAP teachers, many of whom are non-native English speakers (Hyland & Hamp-Lyons, 2002), reflects the need to address the specific needs of academic communities in L2 (second language) contexts. This study seeks perspectives from both EAP and political science teachers to understand these dynamics, especially in ESL/EFL contexts, where differing educational orientations are evident.

In the following section, the concept of genre extends to systemic functional linguistics (SFL), in addition to Toulmin's analysis, which serve as an effective tool to make sense of these multiple functions embedded in argumentation, especially the use of interpersonal meanings.

3.3.2 Systemic Functional Linguistics and Argumentation

The genre perspective on argumentation connects closely with systemic functional linguistics (SFL) which offers a functional lens to understand how “language builds academic knowledge” across subjects (Coffin, 2010, p. 2). According to Schleppegrell (2004), systemic functional linguistics serves as

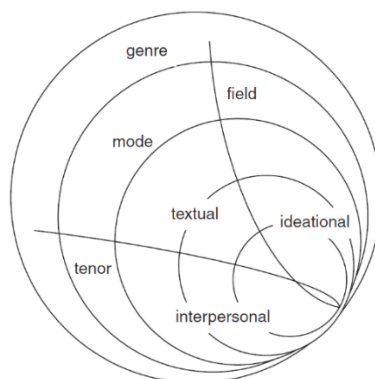
a means of identifying the grammatical features that make a particular text the kind of text it is, so that the relationship of linguistic choices to the situational contexts in which the language is used can be explained in functional terms (p. 19).

SFL is crucial for researching disciplinary language practices like EAP, genres, academic literacies, and specifically academic writing in higher education (Jones, 2004; Hood, 2010). In SFL, texts are viewed as vehicles for constructing meaning, encompassing both content knowledge and relationship within discourse communities (Hood, 2010). This section argues that its insights are particularly valuable for understanding argumentation.

In argumentation, language plays a crucial role in creating meaning, applicable across oral and written forms and in interactions like those between teachers and students (Coffin, 2010). Educational arguments are viewed as a type of discourse where writers must establish a position or stance (Chandrasegaran & Kong, 2006; Chandrasegaran, 2008). Carstens (2008) notes that while academic writing tasks often presuppose argumentation, they are “not explicated in writing prompts” (p. 49). Such texts fall under categories like *exposition* (Carstens, 2008) or *expository writing*, where developing a network of supporting claims enhances the credibility of the writer’s stance (Chandrasegaran, 2008). This perspective on language is further explored through genre and systemic functional linguistics (SFL), as depicted in Figure 3.5 (Martin & White, 2005).

Figure 3.5

Language in different strata (Martin & White, 2005)



The diagram captures the expanding layers of strata and how each element juxtaposes and interacts with one another. Discourse semantics (the system of meaning at the level of discourse) deals with meaning at a broader level than grammar and vocabulary (lexico-grammar). Instead of focusing on individual words or sentences, it looks at how meaning is created across a whole text. It acts as a link between the overall structure of a text (its genre) and the specific language choices, like words and grammar, used to express ideas (Hood, 2010).

These strata begin with the smaller elements of meanings namely, *ideational*, *interpersonal*, and *textual*. These aspects reflect the multiple dimensions within discourse: the disciplinary, formal knowledge, the interaction with the reader and how to convince through authoritative stance, and linguistic resources used in organising scaffolded discourse, respectively (Pessoa et al., 2017).

Moving up to the broader layer of *field*, *mode*, and *tenor*, Halliday (1975) elaborates on these aspects, each corresponds to the previous layer of *ideational*, *interpersonal*, and *textual* meanings:

[*Field*] refers to what is happening, the nature of the social action that is taking place: what is it that the participants are engaged in, in which the language figures as some essential component?

[*Tenor*] refers to who is taking part, to the nature of the participants, their statuses and roles: what kinds of role relationship obtain among the participants, including permanent and temporary relationships of one kind or another, both the types of speech role that they are taking on in the dialogue and the whole cluster of socially significant relationships in which they are involved?

[*Mode*] refers to what part of language is playing, what it is that the participants are expecting the language to do for them in the situation: the symbolic organization of the text, the status that it has, and its function in the context, including the channel (is it spoken or written or some combination of the two?) and also the rhetorical mode, what is being achieved by the text in terms of such categories as persuasive, expository, didactic, and the like.

(Halliday, 1975, as cited in Bruce, 2008, p. 15-16).

In SFL, language revolves around the concept of choices or systems of choices that serve specific functions or meanings, termed "metafunctional foundations" (Halliday & Matthiessen, 2013, p. 30). However, ongoing debates, such as those highlighted by Fontaine (2013), question

the nature of these choices. Understanding disciplinary discourse through linguistic choices is challenged by the diverse range of genres across disciplines, complicating efforts to grasp how choices from linguistic systems at various levels and metafunctions realise meaning within each genre (Humphrey et al., 2010). Moreover, Fontaine (2013, p. 11) emphasises that the concept of choice is polysemic, not fixed to a single notion, suggesting it should be explored in terms of collective/individual aspects or process/product dichotomies. Also, Berry (2013) posits that analysing choices through text analysis can illuminate contexts where specific systems of choice prevail. This points to the necessity for further research into the nature and implications of linguistic choice within specific disciplines.

In political science, SFL offers valuable insights into linguistic patterns and the use of "choices." Thompson's (2013) study on political speech analysed conjunction patterns among politicians, focusing on additive, comparative, temporal, and consequential types across SFL's experiential, interpersonal, and textual metafunctions. The research revealed that political speeches predominantly emphasise experiential meanings, followed by textual and interpersonal meanings. Among conjunctive types, additive conjunctions were most prevalent, followed by consequential, comparative, and temporal. This underscores SFL's utility in examining linguistic patterns and specific choices, such as conjunction use, across various discourses taught in the classroom.

To explore argumentation from a genre perspective in higher education, various argument genres can be categorised. According to Table 3.1, these genres include analytical and hortatory exposition, both aiming to persuade through stages like thesis, arguments, and reiteration. Additionally, the discussion genre encompasses multiple viewpoints and phases. These distinctions highlight diverse practices in higher education argumentation and underscores discipline-specific differences in purpose and structure.

In higher education, studies often emphasise *argument moves*, examining how these moves function within discourse. Defined as "verbal acts expressing meanings aimed at accomplishing a social-rhetorical goal" (Swales, 1990, as cited in Chandrasegaran, 2008, p. 244), these moves include stance assertion and stance support, crucial for persuading readers of the reasonableness of the writer's stance (Chandrasegaran, 2008). Research investigates these practices across formal and informal contexts which highlights their pedagogical implications for academic argumentative writing. Importantly, Andrews (2010) underscores criticality in academic writing, evident through various linguistic markers and the adoption of a sceptical stance toward existing knowledge:

Table 3.1

The four SFL argument genres identified by educational linguists (Thomas, 2022, p. 4)

Argument genre	Purpose	Position(s)	Typical stages	Typical phases
Analytical exposition	Written to persuade readers to believe a perspective on an issue	One-sided	- Thesis - Arguments - Reiteration	- Position - Preview - Point - Elaboration - Evidence - Link - Review - Restate
Hortatory exposition	Written to persuade readers to take some action	One-sided	- Thesis - Arguments - Reiteration	- Problem - Proposal - Point - Elaboration - Evidence - Link - Summary - Call-to-action
Discussion	Written to discuss an issue and persuade readers to agree with one position	Multiple-sided	- Issues - Sides - Resolution	- Background - Preview of stance - Point - Elaboration - Evidence - Example - Rebuttal - Summary - Judgement

Chapter 3

Challenge	Written to rebut an established position	One-sided	- Position	- Challenged position - Preview of arguments - Preview of evidence
			- Rebuttal	- Point - Elaboration - Evidence - Example - Link
			- Anti-thesis	- Review - Final interpretation

by the weighing up of one source against another; by the adoption of a sceptical ‘vow of suspicion (Ricoeur) toward existing published knowledge, rather than by a ‘vow of obedience’; by the development of a point of view; and with the use of surface markers such as ‘however’, ‘nevertheless’, ‘on the other hand.../on the other’, and other devices that enable the student to articulate an argument (p. 45).

Given the extensive literature in Systemic Functional Linguistics (SFL), this discussion focuses on how SFL-informed studies, particularly those emphasising interpersonal meanings, enhance our understanding of argumentative discourse.

3.3.3 The “Interpersonal” in Academic Discourse and Argumentation

Genre studies emphasise writer-reader relations and crucially consider "anticipated audiences and readerships" (Swales, 1990, p. 62). This section focuses on the interpersonal aspect in academic writing, highlighted by Hood (2008) as essential for aligning readers with the writer's viewpoint through persuasive arguments. Analysing interpersonal features in genres like expositions illuminates how perceptions of audience influence rhetorical choices (Hyland, 2005c). SFL and second language writing (SLW) literatures explore theories such as *appraisal* that comprise *engagement*, *attitude*, and *graduation* (Hood, 2010; Martin & White, 2005) and *stance* and *evaluation* (Thompson & Hunston, 2000; Hyland, 2004, 2005a) to understand these interactions linguistically, illustrating their significance in academic discourse. These different “labels”, as Hyland (2005c) puts it, are central to the discussions in how interaction is understood and examined through linguistic patterns.

The study places significant emphasis on interpersonal meanings in academic writing, which are intertwined with genre and informed by SFL. Learners' writing choices are influenced by institutional and intertextual constraints, as well as genre conventions and patterns, shaping patterns of interaction (Hyland, 2005c). These interpersonal concepts, originating from distinct theoretical foundations, often intersect and complement each other, contributing to a comprehensive understanding of academic discourse. This section explores the "interpersonal" dimension in academic writing, focusing on *metadiscourse*, *stance and evaluation*, and *appraisal*. The section concludes with justification of appraisal resources to be analysed in counterarguments and refutations of students' argumentative essays.

3.3.3.1 Metadiscourse

Ken Hyland's seminal work, *Metadiscourse: Exploring Interaction in Writing* (2005b), provides a comprehensive foundation for understanding metadiscourse within applied linguistics and writing studies. Metadiscourse, broadly defined as linguistic devices that guide readers and

convey the writer's stance, underscores writing as a social and communicative act (Hyland, 2005b, p. 14). It serves to orient readers to the text while revealing the writer's communicative intent, embodying personalities, attitudes, and rhetorical strategies (Hyland, 2005b, p. 20).

Comparatively, propositional meanings, similar to ideational content in SFL, focus on the informational or subject content of discourse (Crismore et al., 1993; Halliday, 1994).

Metadiscourse, in contrast, encompasses "non-topical linguistic material" that directs reader interpretation and shapes interpersonal dynamics (Lautamatti, 1978 as cited in Hyland, 2005a, p. 18). This distinction highlights how metadiscourse signals communicative strategies beyond mere content, facilitating reader engagement and comprehension of the writer's stance and intentions. Hyland's perspective on metadiscourse emphasises its role in negotiating meaning and influencing reader perception, illustrating the interactive nature of written communication (2005b). Writers employ metadiscourse strategically to manage reader expectations and interactions, thereby enhancing the effectiveness of academic discourse within varied rhetorical contexts.

Metadiscourse, therefore, serves as a crucial element in discourse analysis, bridging texts with disciplinary, social, or professional cultures by revealing writers' intentions, norms, and audience expectations (Hyland, 2005b). The study of metadiscourse involves both empirical analyses of its patterns in real contexts and corpus-driven approaches, addressing the dynamic use of metadiscourse across different rhetorical purposes (Hyland, 2005b). Functionally, metadiscourse is not merely a linguistic phenomenon but a rhetorical and pragmatic one, where writers strategically employ linguistic features to manage reader interpretation and engagement (Hyland, 2005b). This approach aligns with SFL, which examines interpersonal meanings in texts through evaluation, appraisal, engagement, and stance (Martin & White, 2005; Hood, 2010; Martin & Rose, 2007; Hyland, 2005a, 2005c).

In academic writing, SFL research extensively examines how writers use textual and interpersonal metafunctions to convey information and engage readers (Hyland, 2005a). Metadiscourse analysis within SFL underscores its importance in adapting discourse to professional, institutional, and disciplinary contexts, aiding effective communication for both native and non-native English speakers (Hyland, 2005b). Recent studies have explored metadiscourse in academic contexts. Lee and Deakin (2016) compared interactional metadiscourse in successful versus less-successful argumentative essays, revealing differences in hedging and attitude markers. Ho and Li (2018) investigated metadiscourse in timed argumentative writings among first-year Chinese students in Hong Kong, finding that low-rated students used metadiscourse markers less effectively than their high-rated peers. This

study highlights varying proficiency levels in using metadiscourse for persuasion among these students.

Importantly, Hyland and Jiang's studies (2018) provide insights into evolving trends in metadiscourse usage across academic writing. They found an increase in cohesive features guiding readers through texts, accompanied by a decrease in personal stance and direct engagement with readers (Hyland & Jiang, 2018). Contrasting "textually-oriented" and "pedagogical" papers in their 2022 study, they noted that the former employed higher levels of metadiscourse markers, particularly stance markers, while the latter focused more on engagement through directives and reader mentions. These findings underscore varied disciplinary interests and discursal practices within the broader community of English for Academic Purposes (EAP) scholars and practitioners (Hyland & Jiang, 2022).

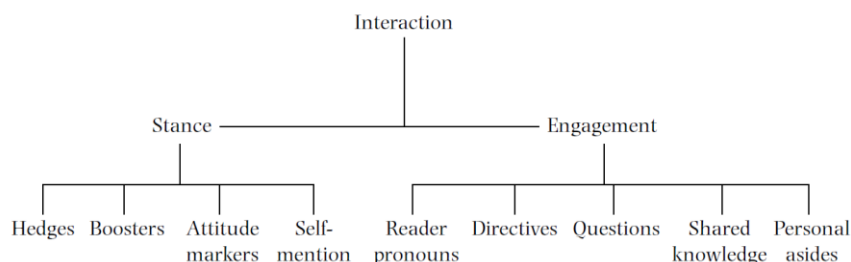
To conclude, metadiscourse plays a crucial role in shaping how readers interpret a text and in communicating the writer's intentions within academic discourse. By bridging textual content with interpersonal dynamics, metadiscourse enhances the communicative effectiveness across various rhetorical contexts. Because metadiscourse is used as an overarching term to cover several discourse elements and patterns, in the following sections, my discussion is grounded in a more focused aspect of the interpersonal. I first explore the notion of *evaluation* including the analysis of *stance* and *engagement* which is central to argumentative genre.

3.3.3.2 Evaluation: Stance and Engagement

The concept of evaluation in academic writing encompasses *stance* and *engagement*, which are crucial for expressing opinions, feelings, and attitudes through discourse patterns (Martin & White, 2005; Thompson & Hunston, 2000; Hood, 2010; Hyland, 2004, 2005a). It is studied under various labels such as *metadiscourse* and *appraisal* (Bondi & Mauranen, 2003 as cited in Hyland, 2005a). According to Hyland (2005a), writers manage evaluative interactions through stance and engagement, emphasising the social perspective of writing where participant relationships are structured and negotiated. Stance and engagement are integral to presenting arguments persuasively in academic discourse, reflecting their interconnectedness and role in academic interaction (Hyland, 2004). The notion of stance is conceptualised to be one of the main resources in academic interaction alongside engagement as shown in Figure 3.6.

Figure 3.6

Key resources in academic interaction (Hyland, 2005a, p. 177)



Writers manage their interpersonal meanings and interaction with the reader through stance and engagement, as described by Hyland (2005a):

- **Stance.** They express a textual ‘voice’ or community recognized by personality which, following others, I shall call *stance*. This can be seen as an attitudinal dimension and includes features which refer to the ways writers present themselves and convey their judgements, opinions, and commitments. It is the ways that writers intrude to stamp their personal authority onto their arguments or step back and disguise their involvement.
- **Engagement.** Writers relate to their readers with respect to the positions advanced in the text, which I call *engagement* (Hyland, 2001). This is an alignment dimension where writers acknowledge and connect to others, recognizing the presence of their readers, pulling them along with their argument, focusing their attention, acknowledging their uncertainties, including them as discourse participants, and guiding them to interpretations.

The stance-engagement distinction explores how writers position themselves (*stance*) and relate to their readers (*engagement*). *Stance* refers to how writers express their attitudes, opinions, and commitments through features like hedges (softening claims), boosters (emphasising certainty), attitude markers (showing feelings), and self-mentions (using "I" or "we"). *Engagement* involves interacting with readers by addressing their expectations and guiding them through the argument using questions, directives, shared knowledge, and personal pronouns. Hyland (2005c) notes that engaging readers serves two purposes: building disciplinary solidarity and anticipating objections to guide interpretation. While stance and engagement often overlap, research identifies two key stance behaviours: stance-taking (expressing a position) and stance-support (building persuasive arguments) (Chandrasegaran & Kong, 2006). Since the 1980s, studies have increasingly shown how disciplinary cultures shape these practices, influencing how writers align with their fields.

The study by Charles (2007) provides a disciplinary lens to this discussion, examining how stance is realised in academic writing across social science and natural science disciplines. Highlighting noun constructions and *that*-clause structures, Charles (2007) found that social sciences often use nouns with *that*-clause complementation to facilitate commentary on propositions. This reflects disciplinary practices in constructing and sharing knowledge: social sciences, including political science, favour recursive knowledge-building through understanding and interpretation (Becher & Trowler, 2001, as cited in Charles, 2007). In politics, this is evident in noun groups related to arguments and ideas, supporting the field's emphasis on constructing persuasive and evaluative arguments. These findings illustrate how disciplinary influences shape both stance-taking and engagement practices, underlining the importance of understanding disciplinary conventions in academic communication.

In brief, evaluation in academic writing reveals these elements not only facilitate the expression of writer authority and interaction with readers but also reflect disciplinary influences on argument construction. The strategic use of linguistic features like hedges and pronouns serves to manage interpersonal relations and enhance the persuasiveness of scholarly discourse. Understanding these dynamics is crucial for both scholars and educators aiming to navigate and teach effective academic communication across diverse disciplinary contexts. Next, a deeper exploration of academic discourse turns towards the critical aspect of *appraisal*, which scrutinises texts beyond *stance* and *engagement*.

3.3.3.3 Appraisal

According to Martin and Rose (2007), appraisal refers to “evaluation – the kinds of attitudes that are negotiated in a text, the strength of feelings involved and the ways in which values are sourced and readers aligned” (p. 25). The reason appraisal is discussed separately from other notions is due to its prominent role in a systemic functional approach and, according to Hyland (2005a), “the most systematic approach” (p. 174) in studying linguistic features related to the interpersonal dimension. Concerning the interpersonal aspect in language, Martin and White (2005, p. 1) proclaim that appraisal resources involve

the subjective presence of writers/speakers in texts as they adopt stances towards both the material they present and those with whom they communicate. It is concerned with how writers/speakers approve and disapprove, enthuse and abhor, applaud and criticise, and with how they position their readers/listeners to do likewise. It is concerned with the construction by texts of communities of shared feelings and values, and with the linguistic mechanisms for the sharing of emotions, tastes and normative assessments. It is concerned with how writers/speakers construe for themselves particular authorial

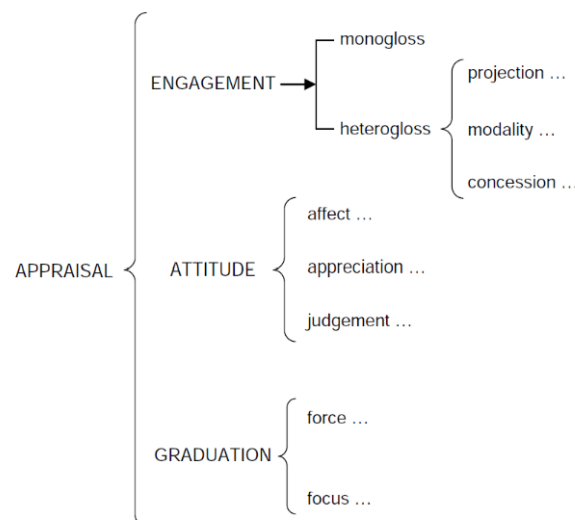
identities or personae, with how they align or disalign themselves with actual or potential respondents, and with how they construct for their texts an intended or ideal audience.

While appraisal shares similarities with the concept of evaluation, many researchers emphasise its specific linguistic choices and resources. Appraisal operates at the discourse semantics level, alongside negotiation and involvement, playing a central role in interpersonal meanings within SFL (Martin & White, 2005). Hood (2010) explains that, although SFL's three metafunctions are complementary, appraisal analysis focuses on interpersonal meaning, acknowledging the need to consider other metafunctions as patterns of interpersonal meaning are explored.

Appraisal encompasses three subsystems: attitude, engagement, and graduation. It is important to note that the term "engagement" here differs from Hyland's (2005a) concept of engagement discussed earlier. In appraisal theory, engagement refers to the ways writers source attitudes and incorporate multiple voices into their discourse, focusing on how perspectives are introduced and negotiated within texts. This contrasts with Hyland's focus on the writer's alignment with readers and interactional strategies. The other subsystems of appraisal are attitude and graduation. Attitude deals with feelings, emotional reactions, judgments of behaviour, and evaluations of things. Graduation involves amplifying feelings and blurring categories, such as intensifying or downgrading meanings (Martin & White, 2005). Together, these resources allow for a detailed analysis of how interpersonal meanings are realised in discourse.

Figure 3.7

Model of appraisal (Martin & Rose, 2007, p. 59)



Appraisal reveals how writers/speakers perceive their relationships based on attitudes and feelings (Martin & Rose, 2007). The term "appraisal" reflects the different dimensions or

domains being evaluated: “(i) the value of things, (ii) people's character, and (iii) people's feelings” (Martin & Rose, 2007, p. 27). These correspond to appreciation, judgment, and affect, respectively, in the appraisal model presented in Figure 3.7.

Central to SFL, based on the system of appraisal, *engagement*, *attitude*, and *graduation* “are semantic systems that each open into domains of more delicate semantic choices” (Hood, 2010, p. 27). Martin and Rose (2007) clarify the appraisal model as follows:

- **Attitude** consists of *affect*, *judgment*, and *appreciation*, which correspond to the three primary regions of feelings. For example, *affect* might express emotions such as joy or frustration (e.g., “She was thrilled by the results”), *judgment* can evaluate behaviour as ethical or irresponsible (e.g., “His actions were commendable”), and *appreciation* refers to aesthetic evaluations (e.g., “The design was elegant”).
- **Amplification** (presented as graduation in the model) deals with grading, encompassing both *force* and *focus*. *Force* involves intensifying or softening meaning, as in “It was an exceptionally difficult task” versus “It was somewhat challenging.” *Focus* sharpens or softens experiential boundaries, such as “This is a true work of art” versus “This is kind of like art.”
- **Engagement** includes resources that bring additional voices into discourse through projection, modalisation, or concession. The main choice here is between a single voice (*monogloss*), as in “This is the only solution,” or multiple voices (*heterogloss*), as in “Some argue this is the best solution.”

The application of systemic functional linguistics (SFL) in genre pedagogy has shown significant benefits in enhancing English language learners’ (ELLs) argumentative writing skills. O’Hallaron (2014) demonstrates that SFL-informed teacher education and interactive learning environments help ELLs develop more logical arguments grounded in academic content, shifting away from personal anecdotes. This highlights the importance of explicit instruction and ongoing discourse about language and texts in fostering academic writing proficiency. Similarly, Schulze’s (2011) study underscores the effectiveness of SFL-based pedagogy in teaching persuasive genres by explicitly teaching genre structure and language resources. The analysis of student drafts reveals improvements in the use of interpersonal resources and reductions in informal language, enabling students to better meet the academic expectations of authoritative voice and genre-specific conventions. These studies emphasise SFL’s utility in scaffolding students’ argumentative writing skills through structured pedagogical approaches and focused linguistic analysis.

In historical argumentation, Miller et al. (2014) and Coffin (2009) highlight the value of SFL-based approaches for enhancing academic writing. Miller et al. observed that teaching

engagement resources from the appraisal system helped students improve their historical arguments, with effective use distinguishing high-graded essays from lower-graded ones. Coffin emphasised the appraisal system's role in evaluating historical events, demonstrating how linguistic analysis can bolster students' argumentative skills in history writing. These studies affirm the effectiveness of SFL-based pedagogies in clarifying academic genre demands and equipping learners with essential lexicogrammatical tools.

Furthermore, Abuhasan (2021) investigates a pedagogic intervention based on SFL's appraisal resources, showing significant improvements in students' use and understanding of argumentative writing. Quantitative analysis revealed increased use of appreciation resources and more nuanced application of judgment and engagement markers post-intervention. Qualitative findings highlighted better text coherence and a more authoritative stance, reflecting greater awareness of lexicogrammatical choices. Abuhasan's study underscores the potential of SFL-based approaches to enhance learners' abilities in navigating complex academic tasks and engaging with textual meaning and structure. Again, the evidence supports the effectiveness of SFL-based pedagogies in developing ELLs' argumentative writing across various contexts, demonstrating their broad applicability and potential to improve academic writing proficiency.

Appraisal theory provides a focused analysis of interpersonal functions in argumentation, distinguishing it from broader metadiscourse techniques aimed at clarity and reader engagement (Hyland, 2005a). It highlights the complexity of evaluation, including stance and engagement, which substantiate claims with authoritative evidence (Bondi & Mauranen, 2003 as cited in Hyland, 2005a). Appraisal resources are crucial for justifying claims by acknowledging and critiquing alternative viewpoints, thereby enhancing argument credibility (Hyland, 2004; Humphrey et al., 2010). This approach deepens the understanding of argumentative discourse and its pedagogical implications, particularly in developing students' abilities to critically evaluate and engage with diverse perspectives.

In essence, our understanding of argumentation depends on which analytical lens we adopt. On one hand, Toulmin's model is beneficial in light of the argumentative elements and how they are supported and justified. The analysis of argument components and structure enable the assessment of argument quality in this regard. On the other, a genre-based perspective on argumentation, particularly from the perspective of systemic functional linguistics (SFL), allows us to examine and understand arguments based on intended functions through the use of linguistic choices. These SFL studies suggest how teaching these resources enhances students' ability to construct coherent arguments, engage with diverse perspectives, and develop authoritative voices in academic writing. This prompts the present study to further explore how

different types of appraisal resources impact argumentative writing in the EAP for political science context.

3.4 Bridging Argumentation and Criticality: Frameworks and Implementations

“Critically reflective thinkers should analyze and evaluate the arguments they can find or construct on behalf of – and also, perhaps especially, against – their own beliefs, rejecting the ones that do not stand up to such scrutiny no less firmly than they reject indefensible arguments and claims asserted by others in support of other beliefs”

(Blair, 1986, p. 190)

In this section, the focus shifts towards establishing a connection between argumentation and the concept of criticality. Building on previous discussions of critical thinking, criticality, and the analytical components of arguments based on Toulmin's model, the aim is to explore how argumentation intersects with criticality from both theoretical and empirical perspectives. While critical thinking and criticality are often treated as overarching concepts encompassing argumentation, understanding them provides a foundational framework for exploring the relationship between argumentation and criticality. The discussion begins by examining studies that link criticality and argumentation, exploring their interconnectedness. Subsequently, attention is directed towards two valuable perspectives for understanding argumentation in the context of criticality development: *learning to argue* and *arguing to learn*. These perspectives offer insight into how engaging in argumentative practices can foster critical thinking skills and contribute to the development of critical citizens.

Argumentation and criticality in the dissertation genre were examined in Andrews (2007) in an attempt to understand opportunities for critical thinking in written form. Following this objective, Andrews makes an interesting observation that

it is the dialogic and dialectical nature of argument that encourages critical thinking. Argument explores differences; it likes to makes distinctions between things and between ideas. It thrives best where, in a democratic society, there is a chance to challenge ideas; to understand, appreciate and resolve differences; and to develop an extended argument, whether in speech or writing” (p. 13).

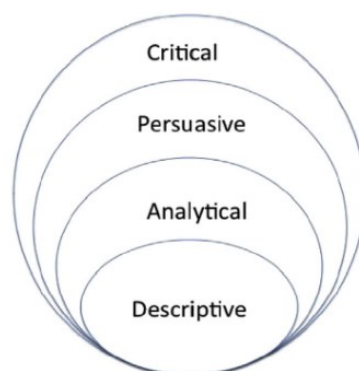
Andrews (2007) argues that critical argumentation should embrace differences, challenge thoughts, and foster extended discussions, essential qualities for argumentative writing. He highlights the integration of spoken and written forms as crucial for effective argumentation.

This aligns with Burbules and Berk's (1999) assertion that being "critical" involves a discerning ability to recognise faulty arguments, hasty generalisations, weak evidence, and ambiguous or unreliable claims (p. 46). Both perspectives emphasise that critical thinking thrives through careful evaluation of ideas and evidence, key elements in argumentative practice. In dissertations, Andrews notes that successful works display scholarship, independent critical thought, original contributions, argumentative coherence, and adherence to presentation conventions. While this raises questions about the alignment of 'successful' and 'critical,' it underscores the role of genre-specific discourse in determining argumentative quality. Andrews' perspective provides a valuable lens on written discourse, though differences between dissertation writing and argumentative essays remain.

Humphrey and Economou (2015) analyse academic writing through an SFL perspective, focusing on disciplinary discourse patterns in biology and education. Their Onion model illustrates a hierarchical relationship among four layers, each serving different functions in academic texts. The model emphasises that effective academic writing integrates foundational functions with more complex ones, crucial for developing persuasive and critical arguments as students progress in their learning (Humphrey & Economou, 2015, p. 3).

Figure 3.8

The Onion: A textual model of critical analysis (Humphrey & Economou, 2015, p. 41)



Humphrey and Economou (2015) employ the concept of phases to analyse "discourse semantic patterns," (p. 38) leading to the identification of four functional layers in their model. The descriptive layer, foundational as "elemental and apprenticing genres," provides the basis for more complex genres (Coffin, 2006; Humphrey, 1996 as cited in Humphrey & Economou, 2015, p. 39). Moving to the analytical layer, characterised by taxonomic and logical organisation, it focuses on organising information in scholarly contexts, although not explicitly recognised by SFL scholars under that term. In the persuasive layer, the goal is overt persuasion, structured around positions or theses supported by reasoned arguments (Humphrey & Economou, 2015). This genre highlights critical orientation and authoritative knowledge derived from credible

sources (Humphrey et al., 2010). At the topmost layer, the critical genre emphasises critique and challenges external positions, distinguishing itself from purely persuasive genres by its critical engagement (Martin & Rose, 2008; Coffin, 2006).

Based on the Onion model, successful academic writing is characterised by its persuasive and critical nature. The distinction between these genres is crucial: while persuasive writing aims to assert a position and justify it with reasoned arguments, critical writing goes further by scrutinising and challenging alternative viewpoints, demonstrating why they may be inadequate or incomplete. In argumentative writing, this distinction underscores the importance of incorporating counterarguments and refutations to enhance criticality. Each layer in the Onion model builds upon the others, meaning that a more robust persuasive and critical genre relies on well-developed descriptive and analytical foundations (Humphrey & Economou, 2015).

This interconnectedness informs the conceptual framework of the present study, which uses the model to differentiate between persuasion and critique in argumentative essays and specifically highlights the rhetorical functions of counterarguments and refutations. Consequently, the study adopts a conceptual framework that guides the analysis of written argumentation. Next, this discussion will expand to broader conceptions of argumentation beyond written discourse alone, encompassing argumentative processes in various contexts.

3.4.1 Learning to Argue vs Arguing to Learn

Understanding argumentation benefits from distinguishing between two distinct-yet-complementary approaches: *learning to argue* and *arguing to learn* (Jonassen & Kim, 2010). Rhetorical arguments aim to persuade through structured reasoning and evidence, focusing on building coherent and justified positions (Zou et al., 2021). Conversely, dialectical arguments emphasise engaging with diverse viewpoints and fostering collaborative dialogue to reconcile conflicting perspectives (Andriessen & Baker, 2022). This dialectical approach aligns with the critical layer of the Onion model, which stresses anticipating counterarguments and constructing rebuttals, challenging learners to overcome biases and engage critically in discourse (Humphrey & Economou, 2015). These approaches enhance students' ability to construct effective arguments and cultivate critical thinking by encouraging them to challenge assumptions and engage with complex issues.

Learning to Argue

In this perspective, *learning to argue*, derived from rhetorical arguments, is an approach in which primary intention is to help students build or construct arguments. In other words, they learn the commonly used ways of arranging or organising an argumentative essay, as well as the

reasoning underlying the content of their essay. This is also known as argument-as-reasoning (Zou et al., 2021). In that respect, argumentation is an end or product (Hirvela & Belcher, 2021, p. 4). Originated in logicism which sees argument as “logical demonstration operating on formal representations of language” (Andriessen & Baker, 2022), logic and sequence of argument structure was a predominant focus. An example of *learning to argue* is the emergence of the Toulminian analysis that provides qualities of a successful argument in this approach:

writers need to reasonably justify their *claim* (assertion in response to a problem) by relating *data* (evidence to support a claim) to it through *warrants* (assumption bridging data and claim) and by using *qualifiers* (placing limits on the strength of the claim), *backing* (support of the warrant), and *rebuttals* (response to opposing views) appropriately (Zou et al., 2021, p. 170).

The *learning to argue* after all provides a foundation for students to learn to develop an argument by considering multiple elements that inform, support, and justify their proposition. The literature suggests that these argumentative elements required in their discipline be taught, rather explicitly, in order for them to practice some of the core structures first before developing a more complex and dialectical argumentation.

Arguing to Learn

Much of dialectical arguments is characterised in *arguing to learn*. It is a pedagogical option in which the main purpose is to help students understand how to use argumentation as a tool of inquiry of learning, that is, as a process or means, not a product, hence the name argument-as-inquiry (Zou et al., 2021). The argumentative process leads them to deeper understanding of a topic or situation of interest to them (Hirvela & Belcher, 2021, p. 4). The *arguing to learn* approach has focused on the less formal aspects of arguments and challenges that, as Andriessen and Baker put it, “a monological approach” (p. 430) fails to include the process of meaning-making of argumentation. According to Andriessen and Baker (2022), the main aim of the students is not to convince their peers but to engage in a dialogical discussion and seek possible solutions by means of a collective effort. This approach is also known as “collaborative argumentation” which is conducive to criticality development.

The concepts of learning to argue and arguing to learn are crucial for understanding argumentation and fostering criticality. Zou et al. (2021) applied these approaches in an EFL classroom, which underlines stages from developing arguments to peer review and reflection. Their study showed notable improvements in managing counterarguments, supporting claims with evidence, and refining argumentative skills. This approach highlights the importance of both constructing arguments and critically engaging with diverse perspectives, as reflected in

the critique layer of the Onion model. This stresses the need for scaffolding to help students handle evidence against their positions effectively (Zou et al., 2021). Recognising these approaches as complementary is vital for enhancing students' argumentative skills and critical thinking. The next section explores how these frameworks inform the conceptualisation and data analysis of the current study.

3.4.2 Conceptual Framework for Argumentation in the Present Study

To understand the nature of criticality development, this section begins by discussing how argumentative discourse is conceptualised in relation to its discourse patterns and metafunctions drawn from SFL. Next, I discuss how the descriptors of metafunctions are adapted and assigned to each pattern, which paves the way for the justification of the analysis of dominant metafunctions. This conceptual framework is pertinent to the argument analysis of students' essay writing in the present study because it informs dominant metafunctions and theoretically guides the development of the analytical framework, discussed in the following section.

The interpersonal metafunction plays a pivotal role in academic argumentation (Dreyfus et al., 2016), emphasising its critical yet challenging nature (Pessoa et al., 2017). According to Hyland (2004), effective academic writing surpasses mere representation of facts by actively engaging in the construction and negotiation of social relationships through language, including metadiscourse, evaluation, and appraisal. These components collectively illuminate how writers manage interpersonal dynamics within their texts. This perspective resonates with the hierarchical discourse patterns elucidated in the Onion model (Humphrey & Economou, 2015), where mastery of interpersonal meanings is foundational.

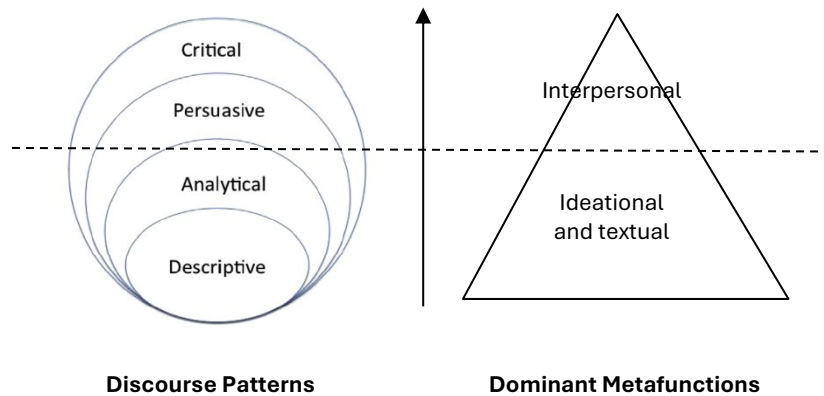
Importantly, Dreyfus et al. (2016) argue that the development of criticality in academic writing is intricately tied to the effective use of interpersonal resources such as metadiscourse and appraisal. They highlight how writers strategically employ these resources to negotiate their stance and engage with readers, thereby enhancing the persuasiveness and credibility of their arguments. This theoretical perspective aligns with the adaptation of metafunctions from systemic functional linguistics (Halliday & Matthiessen, 2004; Humphrey et al., 2010), which underpins the present study's conceptual framework (Figure 3.9).

On the left, the Onion model differentiates key linguistic functions crucial for effective argumentative discourse. Designed to scaffold students into academic writing norms, it guides learners from foundational descriptive and analytical stages towards more advanced persuasive and critical approaches, aligning with the goals of argumentative writing. This progression is vital as students engage in structured argumentation, from taking positions to

addressing counterarguments, providing evidence, and concluding their arguments. The model emphasises the educational value of apprenticing students in discipline-specific discourse patterns, crucial for developing proficiency in academic writing (Humphrey & Economou, 2015). Its pedagogical implications underscore its role in cultivating critical argumentative skills throughout the study.

Figure 3.9

The integrated framework for analysing critical discourse pattern



On the right, the study represents the interrelation of how *interpersonal* metafunction is built on both *ideational* and *textual* metafunctions in SFL (Halliday & Matthiessen, 2004; Humphrey et al, 2010) by a triangle shape. The lower part serves as a foundation of the upper part of the triangle. The dotted line draws the boundary between the four levels of argumentation and the three metafunctions while representing the dynamic relationships between the top and the bottom sections. The upward-pointing arrow in the middle represents the direction of how the students build up their levels of argumentation and the metafunctions used in their argumentative discourses.

In academic writing, counterargument and refutation closely align with critical discourse patterns. They challenge the author's stance by presenting alternative viewpoints supported by authoritative sources (Table 3.2). This process encourages students to rigorously evaluate opposing perspectives and develop their arguments through logical reasoning and credible evidence. By contrasting different viewpoints and effectively using scholarly sources, students establish a robust critical stance that enhances the depth and persuasiveness of their argumentative discourse within Political Science education.

Table 3.2*Discourse patterns in the Onion model and argumentative discourse in the EAP course*

Discourse patterns (adapted from Humphrey & Economou, 2015)		Argumentative discourse in the EAP for Political Science
Critical	• Challenging writer's stance and positioning of the reader to accept an authorial alternative/counter position • Developing a critical stance by presenting an external position/stance, rebut it, and present a counterargument • Using support that shows greater authority (e.g., high status external sources) in reasoning to justify/support the counter argument and refutation more effectively • Using contracting resources to establish a critical stance	Most evident in: • Counterargument and support • Refutation and support
Persuasive	• Developing a persuasive stance through consistent pro arguments and support • Using support that shows greater authority (e.g., high status external sources) in reasoning to justify/support the pro arguments more effectively • Using contracting resources to establish a persuasive stance	Most evident in: • Introduction and position statement • Pro argument 1 and 2 and support • Conclusion
Analytical	• Reorganising information in some original way for the purposes of the text • Linking information in a taxonomic and logical way • Using 'nominalisations' and 'abstractions' in presenting logical relations	Most evident in: • Overall discourse
Descriptive	• Summarising to reproduce knowledge through • <i>entity-focused</i>: describing entities within noun groups) and explaining relevant concepts in the discipline or the way things are within the social context or phenomenon • <i>event-focused</i>: describing sequence of events, recounting procedures or experiences, discussing field knowledge but not in a contested way	Most evident in: • Overall discourse

The application of appraisal theory offers a focused lens on understanding the intricate linguistic mechanisms underpinning interpersonal interactions within argumentative discourse. It investigates the expressions of attitude through engagement and graduation and elucidates how writers navigate the complex terrain of argumentation to assert and defend their positions effectively (Martin & Rose, 2007). By emphasising interpersonal meanings, examining appraisal resources allows for a detailed exploration of how students develop criticality in academic writing, particularly in their ability to evaluate and engage with multiple perspectives.

By adapting this framework to the context of the present study, it is important to note certain limitations this may cause. First, SFL categorisation into discrete metafunctions (ideational, interpersonal, textual) may oversimplify the nuanced complexities inherent in critical discourse. This framework's emphasis on classification might obscure subtle shifts in tone, attitude, or strategic rhetorical manoeuvres that writers employ in challenging established viewpoints or bolstering their arguments through counterarguments and refutations. Moreover, the Onion model's hierarchical approach, while beneficial for guiding students through foundational to advanced argumentative strategies, could risk imposing artificial boundaries on the development of criticality. It may not fully accommodate the contextual variability and

situational appropriateness demanded in authentic academic discourse, where critical engagement often evolves through adaptive and context-specific rhetorical choices.

Having said that, these frameworks provide a systematic analytical framework to identify and analyse rhetorical strategies employed by students. By focusing on interpersonal metafunctions such as appraisal, they illuminate the linguistic resources students utilise to negotiate meanings, challenge assumptions, and effectively participate in scholarly debates. Moreover, SFL's approach to language as a social semiotic system reinforces its relevance in educational contexts where cultivating critical thinking and argumentative competence is paramount. The structured analysis facilitated by SFL and the Onion model enables the present study to track students' written argumentative proficiency, from grasping foundational concepts to critically engaging with disciplinary knowledge and diverse perspectives.

3.5 Summary and Conclusions

This chapter examines the theories and research pertinent to argumentation, argumentative discourses, and the functional (genre-based) approach and explores their theoretical links to criticality. The Toulminian model provides a traditional yet insightful framework for justifying well-argued propositions, emphasising the necessity of robust supporting evidence and the structural components of successful arguments. For this study, Toulmin's model effectively assesses argument quality. The distinction between field-specific and field-invariant arguments highlights how argumentation is conceptualised differently across disciplines, transitioning from generic skills to a discipline-specific focus.

The role of discourse communities, EAP, epistemological knowledge, particularly in the social sciences, influences the nature of argumentation, leading to a functional approach that centres on argument genres and their rhetorical functions within SFL. The SFL approach significantly informs this study's exploration of argumentation and criticality, suggesting that certain argumentative elements are more complex and critical, particularly within the interpersonal metafunctions.

Understanding argumentation in higher education through "learning to argue" and "arguing to learn" frameworks is crucial. The former aligns with the traditional, rhetorical view focusing on argument structures like the Toulminian approach, while the latter encompasses a critical, dialectical perspective that involves collaborative discussions and the co-construction of knowledge. These frameworks are integral to achieving the objectives of the present study. The following chapter outlines the methodological approach adopted for this study.

Chapter 4 Methodology

Informed by the interpretivist paradigm (Cohen et al., 2018; Peel, 2020), this qualitative case study scrutinises the nature of criticality development by conducting a comprehensive examination of argumentation and its underlying dynamics within the context of EAP for Political Science. This approach foregrounds the subjective interpretation of participants' experiences and the social construction of knowledge within educational contexts.

The research objectives encompass three main areas of investigation:

- **Conceptualisations of Criticality and Argumentation:** This objective aims to unravel the conceptualisations and perceptions of criticality and argumentation held by teachers in both EAP and political science. It examines how criticality and argumentation are understood based on practical experiences in the classroom and the role they play in the discipline of political science.
- **Pedagogical Practices and Strategies for Criticality through Argumentation:** This objective investigates the pedagogical strategies employed in the EAP for political science course to nurture argumentation skills among students. It explores the foundational role of critical thinking in shaping effective argumentation and investigates the impact of instructional approaches on criticality development.
- **Critical Discourse Patterns and Linguistic Demands for Criticality in Argumentative Writing:** This objective focuses on the linguistic dimensions underlying argumentation and critical discourse within the EAP for political science context. It analyses discourse patterns and linguistic choices in argumentative writing to understand their role in expressing criticality.

Drawing on a qualitative case study approach, the research methodology facilitates an in-depth exploration of the nature of criticality development within the EAP for political science context. The chapter discusses the rationale for the chosen methodology, research context, participants, data collection procedures, reliability and validity considerations, ethics, and data analysis methods.

4.1 Research Design and Philosophy

“It cannot be said that all institutions, disciplines, and individual lecturers are the same when it comes to the demands they make on students and the ways in which they mediate argumentation for their students.”

(Andrews, 2010, p. 60)

What Andrews (2010) articulates here resonates with the core objective of the present study that underlines the institutional, discipline-specific, and individual practices related to argumentation and its nature of criticality. The notion of criticality and argumentation, as discussed in the previous chapters, is abstract, complex, and interrelated. This means it requires a sensitive, open, and flexible approach to scrutinise this type of phenomenon. Empirical evidence of such nature is therefore needed to help map part of larger conceptualisations of criticality development.

Due to the elusive and complex nature of criticality development, the present study aligns with the interpretivist paradigm to reflect the nature of the data and the phenomenon in focus. The interpretive paradigm is based on a "subjectivist, interactionist, socially constructed ontology" and an epistemology recognising "multiple realities, agentic behaviors, and the importance of understanding situations through the participants' perspectives" (Cohen et al., 2018, p. 175). Peel (2020) similarly argues that an interpretivist approach supports "multiple realities from both the researcher and the participants" (p. 4), rejecting the idea of a singular truth. This stance suggests that knowledge is constructed through personal experiences and interpretations, implying diverse realities shaped by individual perspectives. For this study, it means that the conceptualisations of criticality may vary among stakeholders, such as EAP instructors and political science lecturers, prompting the need for a qualitative exploration of the phenomenon from multiple viewpoints.

Drawing on the interpretivist paradigm (Cohen et al., 2018; Peel, 2020), the study, therefore, allows for the emergence and scrutiny of different conceptualisations and perceptions of criticality. This approach recognises that these concepts are understood and applied differently depending on individual interpretations and roles within the educational context. By embracing this diversity of perspectives, the research aims to uncover the nature of criticality development in the EAP for Political Science setting. Qualitative case study research, as advocated by Hood (2009), aligns well with the interpretivist paradigm by focusing on the exploration of "multiple, contradictory, and context-rich realities" (p. 68). This methodology is suitable for investigating the multifaceted dimensions of criticality in the EAP for political science context, allowing for a deep and comprehensive analysis of the phenomenon.

There are four key characteristics of a case study (Richard, 2011) that align with those of the present study:

- **Boundedness:** A case study defines a specific research context with clear boundaries, considering relationships within the context and its broader setting (Hood, 2009; Heigham & Croker, 2009; Richards, 2011; Merriam, 1988; Creswell, 2007). Hood (2009)

highlights that boundedness helps researchers understand the research context as a cohesive unit with interrelated sub-units, encompassing individuals and institutions.

- **Contextualisation:** Case studies reflect phenomena within unique spatial and temporal contexts (Richards, 2011; Dyson & Genishi, 2005). Richards (2011) distinguishes between the situated context (geographic, political, cultural) and the axial context (broader phenomena), aligning with Dyson and Genishi's (2005) emphasis on the embeddedness of cases within broader frameworks.
- **Natural Context:** Case study research occurs in the natural setting of the phenomenon (Richards, 2011; Hood, 2009). This requires methods that capture the richness and complexity of the setting while considering ethical participant anonymity (Hood, 2009).
- **Multiple Data Sources:** Case studies use various data sources for comprehensive insights (Richards, 2011). This approach allows for cross-referencing and triangulation, enhancing validity and reliability, and reflecting the complexity of the phenomena.

These characteristics inform the methodology of the present study and reflects its socially-embedded nature and complex research context. The concept of boundedness operates at multiple levels within the study: from individual participants to the EAP classroom and the broader institutional context of the university. This multi-level perspective contextualises the research setting and highlights the influence of institutional factors on EAP practices and the conceptualisation of criticality. The following section unfolds the research context, focusing on the EAP for Political Science courses at the university and provides details about the EAP curriculum, the argumentative tasks, and participants involved in the study.

4.2 Research Context

This section provides an overview of the university and its language institute, detailing the context and structure of the EAP courses offered to political science students. It explores the Faculty of Political Science, including its departments and the Bachelor of Political Science programme. Then, the sampling strategies and research participants, including EAP instructors, political science lecturers, and students, are also discussed.

4.2.1 The University

The fieldwork took place at a large public university in Bangkok, Thailand. The university is a comprehensive institution with multiple faculties, institutes, and colleges. In 2023, there were over 30,000 students and over 8,000 staff. The university is well-regarded for its long history and commitment to quality education, research, innovation, and sustainability.

The university aims to enhance its international presence by offering a variety of international programs at the bachelor's, master's, and doctoral levels. Due to its strong reputation, it has become a highly sought-after institution, attracting a significant number of applicants each year. As a result, admission is highly competitive, with a limited number of spaces available.

This university provides a valuable context for examining criticality development through argumentation in political science students, particularly given its emphasis on innovation, research, and internationalisation. However, the competitive and reputation-driven nature of the institution may also shape its teaching priorities, potentially influencing how criticality is fostered within academic practices. While the study is local in scope, its transferability lies in the theoretical framework and research methods employed. These methods, grounded in rigorous analysis of argumentation and criticality, offer insights that can be applied to similar disciplinary EAP settings, highlighting broader implications for teaching and learning in political science and beyond.

4.2.2 The Language Institute and the EAP Course

The language institute operates as an independent unit within the university, responsible for delivering English language education across various faculties and degree programs. It offers both compulsory and elective courses, including foundational English courses for all undergraduate students, as well as specialised courses tailored to specific disciplines, such as speaking, listening, reading, writing, and EAP. At the postgraduate level, the institute collaborates on advanced degree programs related to English language studies. Additionally, it provides a range of language services to both the university community and the public, including exam preparation, language skill development, and translation and proofreading services.

Based on its official website, the language institute vision and mission are as follows:

Vision: The language institute aims to be a leading entity in advancing knowledge and innovation in English language learning and teaching, with a focus on lifelong learning and global application.

Mission: 1) To develop graduates proficient in English for professional use; 2) To conduct research and foster innovations in English language education on both national and international levels; 3) To integrate research-based insights and innovations into English language teaching practices; 4) To disseminate research findings and innovations to the broader community and contribute to the advancement of English language education.

In short, the language institute's role is to provide English language education for the university and the wider public as well as to produce research in English language teaching and innovation.

Regarding the EAP courses, there are two “EAP for Political Science” courses, EAP I and EAP II, offered by the language institute at the university. These courses are required for the Bachelor of Arts Program in Political Science. A pilot study was partially conducted on EAP I, but most data from this phase were used as preliminary and thus excluded from the main analysis, except for relevant documents used in the course. (Details related to the pilot study are discussed in a later section.) The actual fieldwork and data collection took place during the second half of the academic year, focusing on EAP II.

In the academic year of 2021, the EAP courses were taught by a team of six instructors across eight sections per semester, with one instructor serving as the coordinator. Before enrolling in EAP, most undergraduates must complete two foundation English courses in their first year, which focus on general English skills. In their second year, students enrol in EAP I in the first semester and then EAP II in the second semester. The course information for both EAP I and II is provided in Table 4.1 below.

Table 4.1

Course information for EAP I and II

	EAP I	EAP II
Course Description	Practice in reading, paragraph writing, and discussing new reports and articles on related fields of study and contemporary world issues	Further practice in reading news reports and articles related to political science; writing paraphrases, notes, summaries, and paragraph expressing opinion; and participating in oral discussions
Learning Objectives	By the end of the course, students should be able to do the following: 1. read news reports and articles on contemporary political topics from various media; 2. answer comprehension questions in written and/or oral form; 3. write short paragraphs expressing opinions; 4. participate in oral discussions related to the texts	By the end of the course, students should be able to do the following: 1. read news reports, magazine articles, and semi-academic texts related to political science; 2. write paraphrases; 3. write summaries; 4. write paragraphs expressing opinions; 5. participate in oral discussions related to the texts read
Units	Unit 1: Reading strategies Unit 2: Understanding paragraphs Unit 3: Immigration Unit 4: War and peace Unit 5: The struggle of human rights Unit 6: Science and politics	Unit 1: Paraphrasing Unit 2: Summary writing Unit 3: Controversial issues (Argumentative writing)
Course Evaluation	1. Assessment of academic knowledge (80%): - Mid-term examination (40%) - Final examination (40%)	1. Assessment of academic knowledge: Final (take-home) examination (25%) 2. Assessment of work or classroom activities (50%) - Attendance and participation (5%)

2. Assessment of work or classroom activities: assignments (10%) 3. Assessment of the assigned tasks: oral discussion and reflection (10%)	- Classwork (45%) 3. Assessment of the assigned tasks (25%): - Vocabulary quiz (10%) - Oral discussion (10%) - Report writing (summary and opinion) (5%)
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Unlike the foundation courses, the core instructional materials for the EAP courses are in-house textbooks, designed, compiled, and written by the EAP instructors at the language institute.

Regarding the course content, students learn to write paragraphs and summaries in the first two chapters, progressing towards constructing an argumentative essay in the final chapter. Key assessments related to argumentation include a group discussion task and a final exam essay.

More details about the argumentative tasks and assessment criteria are provided in the following section.

At the time of conducting the pilot studies and fieldwork (2021 – 2022), the teaching and learning of the EAP course was in the middle of the COVID-19 pandemic. This resulted in the university's decision to move most courses online including all the EAP courses due to a series of official announcements made by the university to safely manage the teaching and learning during the pandemic and avoid unnecessary face-to-face meetings. Such policy was also implemented nation-wide and to be adapted where appropriate by each educational institution. The EAP II was conducted 100% via an online platform during the data collection period of the present study. The course was conducted on the video-conferencing programme Zoom with its own institutional license.

4.2.2.1 Argumentative Writing: Structure and Assessment

Based on the EAP II course, information from the textbook, the classroom activities, and the assessment criteria for argumentative writing suggested specific features that the students were expected to follow. The argumentative writing instruction was in the final section of the textbook: “Unit 3: Controversial Issues.” The following outlines the structure and features of argumentative writing used in the EAP course:

- I INTRODUCTION
 POSITION STATEMENT
- II COUNTER ARGUMENT
 REFUTATION
- III PRO ARGUMENT 1
 SUPPORT
 PRO ARGUMENT 2
 SUPPORT
- IV CONCLUSION

Given the specific requirements in the course syllabus, the textbook, and the criteria in the final examination, the argumentation patterns were to a large extent fixed by these predetermined

features, argument moves, and the assessment prompt (Appendix A). This structure is observed in the final examination essay. The task description of the essay shows that the structure of arguments was formally assessed in the course assessment. Because it was an online, take-home examination, a few observations could be worth mentioning here. First, what the students learned in class is reflected in the final assessment, so the students likely had a clear idea of what to expect from the course assessment. Second, this was a take-home examination which means that the students had comparatively more time to write the essay at home (24 hours) rather than a usual timed examination that lasts 2 or 3 hours. Third, the word limit of the task was strictly observed. This means that students had somewhat limited space to express their ideas and support their arguments. The scoring criteria for assessment of the task were as follows:

Content	The presence of the main components of an argumentative essay and the effectiveness and soundness of the introduction, arguments for and against, supporting details, and conclusion
Language	Accuracy of grammatical usage, sentence structure, and word choice
Cohesion & Coherence	Use of transitional markers, sentence connectors, and other cohesive devices
Reference	Acknowledgement of the sources of information used as supporting details in the essay

Although critical thinking is not explicitly stated as a course objective in the curriculum documents, this does not imply that criticality is absent from the courses. The nature of criticality development does not always need to be explicit to be present and influential. In the previous chapters, the literature suggests that various forms of criticality can be embedded in specific tasks, lessons, and activities, fostering students' critical thinking skills implicitly. Therefore, the study aims to render visible both the presence and potential absence of criticality in argumentative practices, aligning with the broader objectives of preparing students for the disciplinary demands of political science. This elusive and subtle nature of criticality, including its gaps, necessitates a thorough examination to fully understand its role and impact within the curriculum. The exploratory research objective therefore helps guide the overall research design and methods towards a deeper understanding of the complexities of criticality development in this context.

In the next section I elaborate on the Political Science Programme to understand the nature of the students' discipline, particularly how the discipline could shed more light on argumentation.

4.2.3 The Faculty of Political Science

The Faculty of Political Science at the university consists of four departments including Government, International Relations, Public Administration, and Sociology and Anthropology and offers both undergraduate and graduate degree programmes. Its core vision is to be a leader in constructing knowledge in political science on a national and global scale and innovations for social sustainability. Its missions include 1) producing competent political science graduates that are future leaders for the public good, 2) constructing knowledge and innovations necessary for national and international development, 3) advocating ethical management and administration for sustainable development, and 4) enabling research and academic services to guide the society and respond to societal needs.

In the following section, the Bachelor of Political Science Programme structure, the programme's descriptions, nature, and some of the core courses are presented. This contributes to the institutional background of the political science students in the EAP course and could shed more light on what it could mean for them regarding criticality and argumentation. Despite having four different programmes to choose from (Government, International Relations, Public Administration, and Sociology and Anthropology), all the first-year undergraduates share the same curriculum until they enter into their own majors in the second year, in which the core courses begin to differ. The Faculty of Political Science therefore is not limited to politics, political ideas or theories but encompasses larger aspects of the social sciences as well.

The Bachelor of Arts in Political Science

Based on the curriculum for the Political Science Undergraduate Programme, it is stated that political science graduates can apply for an array of career paths in public and private sectors. These include, but are not limited to, teachers, researchers, deputy district chiefs, policy analysts, fiscal analysts, diplomats, international affairs officers, justice officers, social workers, government officers, and human resources officers. Apart from these sectors, they can work in non-profit organisations and international organisations including, for instance, the United Nations, ASEAN, Asean Economics Community (AEC), World Trade Organisation (WTO), Asia-Europe Meeting (ASEM), Asia-Pacific Economic Cooperation (APEC), and International Labour Organisation (ILO). This implies a mastery of multiple skills to adapt to such various natures of professions.

The rationale and significance of the programme appear to associate with a certain degree of criticality. First, it is stated that the foundation of political knowledge across the four departments involves the use of reasons, logic, research and basic statistics in social sciences.

Second, it is stated that the role of English is central to professions in political science and provides a career advantage. The aim is to be able to apply both language skills and professional skills in political science. Third, it is stated that the revised curriculum is up-to-date with current political events and modern societies so that the students are aware and able to apply foundational knowledge to other courses of their interests. Finally, it is stated that the political science graduates should be able to:

- *Connect and compare between theories and practices in modern world*
- *Be knowledgeable about their specific subject areas which is up-to-date and ample for furthering a higher degree in both national and international institutions*
- *Acquire enough academic knowledge to be leaders in their subject areas*
- *Have analytical and critical skills, be visionary, and have original ideas*
- *Pinpoint social issues, analyse problems, and construct well-informed critiques*
- *Follow ethical codes of conduct in their professions both as a citizen and political scientist.*

All in all, the BA Programme in Political Science covers a range of ideas and theories in political as well as social sciences in general. Despite studying in a different department, students are expected to acquire transferable and specific skills to engage in their study and have opportunities to learn from other subject areas from the other departments. The English language also plays a key role in succeeding as a political science graduate, addressing the centrality of the EAP courses as core courses in the curriculum. In terms of criticality, there is a clear statement relating to the need for these analytical and critical skills in critically tackling or criticising social issues and problems.

4.2.4 Sampling Strategies and the Research Participants

Given the qualitative nature of this research, the focus is on individuals or groups within the research context. Qualitative sampling emphasises the uniqueness and distinctiveness of the phenomenon or individuals in question (Cohen et al., 2018), making issues of sample size, representativeness, and generalisability less relevant. Instead, this study seeks "fitness for purposes" (Marshall & Rossman, 2016, p. 18), meaning the sample size varies based on research purposes, context, and data needs. Understanding the EAP practice and criticality development as a single case study, the research scope is 'bounded' and 'contextualised,' making the size of the unit a non-issue (Richards, 2011). Thus, this study uses a stratified purposeful sampling technique (Durdella, 2019), involving all participants in the EAP programme, including both teachers and students, as well as lecturers from the Faculty of Political Science.

4.2.4.1 The EAP Instructors

A team of 6 instructors was responsible for teaching EAP I and II across all the eight sections (Some taught more than one section.) In the academic year of 2021, EAP II consisted of 2 foreign instructors and 4 Thai instructors. There was one instructor who also worked as a course convenor (coordinator). Based on institutional requirements, Thai instructors must hold a relevant degree in linguistics or language teaching and must complete at least a master's degree (PhD preferable), while foreign staff with any degree (Bachelor's degree minimum) must acquire a TESOL/TEFL certificate.

The three EAP instructors who agreed to take part in the interviews brought diverse academic and professional expertise, with advanced degrees spanning applied linguistics, second language studies, English language teaching, economics, and political science from institutions in Thailand, the USA, and Australia. One instructor also holds a TEFL/TESL certification.

Collectively, they have significant teaching experience: **Oranee** with 7 years, **Anuchit** with 13 years, and **Chaiwat** with 8 years (These names are pseudonyms). Their varied qualifications and professional backgrounds enrich the insights into teaching and learning practices examined in this study. The course convenor classroom (Oranee) was observed.

4.2.4.2 The Political Science Lecturers

The Faculty of Political Science at the university consists of 4 departments including Government, International Relations, Sociology and Anthropology, and Public Administration. All full-time faculty members are PhD holders in the relevant areas of the department in which they teach. Despite having limited access to the department, I reached out to several lecturers in all four departments and was able to recruit three representatives from different departments to take part in the interview.

The three political science instructors in this study hold extensive academic qualifications and diverse specialisations. Their academic credentials include advanced degrees in political science, development studies, and international relations from renowned institutions in Thailand, the UK, and the USA. They possess substantial teaching experience: **Pitak** (Government) with 7 years, **Unchalee** (Public Administration) with 6 years, and **Veena** (International Relations) with 15 years (These names are pseudonyms). Their professional backgrounds provide valuable perspectives on the intersection of political science and EAP instruction explored in this study.

4.2.4.3 The EAP Students

The students in the EAP II are second-year undergraduates from different fields of study including Government, International Relations, Sociology and Anthropology, and Public Administration. Therefore, there was a mixture of different political science majors in an EAP course. Students were assigned to specific sections based on their performance in foundation English courses the previous year, grouping them according to similar English proficiency levels. In this study, the observed EAP course was section 4 out of 8, indicating that the students' language abilities in this section were comparatively moderate among their political science peers in the other sections. During observations, the class consisted of 29 students, while the total number of political science students for the academic year was 218.

Despite efforts to recruit participants, only one student agreed to participate in an interview. This low participation rate raises significant concerns about the validity and reliability of any conclusions drawn from such a limited sample. With only one interview, the data would lack the necessary diversity and breadth to provide meaningful insights into the students' perspectives and experiences. Additionally, this would prevent the identification of common themes or significant patterns, which are essential for robust qualitative analysis. Consequently, student interviews were excluded from the study to maintain the integrity of the research findings and to avoid drawing potentially misleading or unrepresentative conclusions. This decision is detailed in the data collection section.

4.3 Pilot Observation (EAP I)

The primary objective of this pilot study was to gain familiarity with the research context and current English language teaching practices within the institution through unstructured classroom observations. These observations aimed to inform the design of the research and the selection of appropriate research instruments tailored to the nature of the data in this setting. Due to the COVID-19 pandemic during the pilot study period, all observed courses were conducted online using virtual video-conferencing platforms.

From August to November 2021, I observed two EAP courses designed for political science students, led by a Thai instructor and a foreign instructor, with approximately 30 students per class. These courses focused primarily on developing essential reading skills for political science discourse. While both instructors used the same instructional materials—comprising reading strategies and texts pertinent to political science—differences in teaching approaches were evident. Classroom discussions involved contentious issues such as civil wars, gender equality, immigration policies, and human rights, fostering critical engagement among

students. However, a considerable portion of class time was also devoted to ensuring comprehension of text structures. Moreover, exercises aimed at identifying author opinions and inferring reasoning from texts suggested intentional efforts to nurture students' critical reading abilities.

Despite these observations, the nature of criticality within these tasks remained elusive and varied significantly in its manifestation. The pilot study underscored the significance of classroom observation in capturing several aspects of classroom dynamics and revealed varying teaching approaches and priorities despite the use of identical instructional materials. This variability indicates that criticality is not uniformly present or explicitly taught but can emerge subtly through collaborative discussions and personal connections drawn by students. Topics such as civil wars, gender roles, immigration, genetic modification, and human rights sparked debates and reflected the complexity of the issues discussed. The emphasis on understanding text structures and author perspectives, coupled with exercises to infer meanings from texts, further underscored efforts to cultivate critical reading skills.

These observations suggest that varying degrees of criticality likely manifested across different levels, evident in the students' collaborative meaning-making and engagement with contentious issues. However, the elusive nature of criticality requires a more nuanced approach to data collection, analysis, and interpretation. The pilot study highlighted that deeper insights into participants' beliefs, perceptions, and experiences are crucial for understanding how criticality is conceptualised and integrated within the EAP context. By acknowledging the varying degrees and subtle manifestations of criticality, the study's approach to data collection and analysis aims to provide a more comprehensive understanding of criticality development within the curriculum.

4.4 Research Instruments

To achieve the research objectives, as a qualitative case study, the present study implemented different research instruments in order to elicit rich data related to participants' perceptions and conceptualisations about criticality, the instructional strategies related to argumentation, and the argumentative writing. Based on the concept of boundedness, it is important to note that the study focusses on "a specific group of participants, sample, and sites which met the criteria necessary to carry out this research study" (Peralta et al., 2014, p. 33-34 as cited in Durdella, 2019). The use of observation and interview serves as "an accurate depiction" (Durdella, 2019, p. 181) to examine this type of phenomenon which relies on the use of multiple methods to understand the nature of criticality development from different perspectives, hence different data sources.

4.4.1 Observation and Video-recording

Classroom observation is a paramount method for comprehending the phenomenon of criticality development and argumentation within the classroom setting. Cohen et al. (2018) categorise this type of data as "first-hand, 'live' data in situ from naturally occurring social situations" (p. 542). Cowie (2009) defines observation as "conscious noticing and detailed examination of participants' behaviour in a naturalistic setting" (p. 165). Participant observation, as described by Kawulich (2005, as cited in Cohen et al., 2018), allows for examining key terms, events, or behaviours that might not emerge during interviews. This method enhances the authenticity of the research setting and supports the identification of subtle patterns in argumentative practices. This approach is invaluable in applied linguistics research focusing on language teaching and learning dynamics, as it unveils classroom practices shaped by entrenched values, beliefs, and assumptions about educational processes.

Observation is particularly important for the present study, as it allows for an immersive understanding of criticality development through classroom discussions in the EAP classroom. As a qualitative case study, observation facilitates the researcher's immersion in the research setting while minimising their presence and interference and contributing to the authenticity and validity of the data. This approach enables the identification of patterns and routines inherent in classroom interactions, which might not surface through other research methods alone. Implementing observation systematically, the present study employed naturalistic and participant observation to address its research questions. The observational data was also triangulated with teacher interviews to identify alignments, potential discrepancies, and emerging themes.

In the EAP class, I assumed the role of an "observer-as-participant." Cohen et al. (2018) describe this role as one where the observer is not a group member but participates peripherally, with their role as a researcher being clear and unobtrusive. My camera was turned off during the observation. This approach ensured minimal disruption while maintaining transparency about my research intentions. The use of video recording alongside observation was crucial for enhancing the validity of the data. Video recordings, obtained directly from the Zoom application on which the EAP course took place, facilitated accurate documentation and allowed for a comprehensive review of observed events, ensuring that alternative perspectives could be explored and revisited during analysis.

Despite its usefulness, observation as a research method comes with certain precautions. Firstly, observational data is inherently subjective, limited to the researcher's perspective, and may not uncover hidden motives or beliefs influencing observed behaviours. To mitigate this, video recordings were used to corroborate observed behaviours with actual classroom

interactions. Additionally, observational data was triangulated with field notes to provide a more comprehensive understanding. Secondly, observation risks selectivity and may be influenced by the researcher's agenda. To address this concern, a less structured observation approach was adopted to minimise selectivity and allow for the observation of multiple facets of classroom interactions.

Field notes

During each observation session, I maintained detailed field notes to document significant classroom events and provide immediate commentary, enhancing my understanding of the observed phenomena. As described by Emerson et al. (2001, as cited in Richards, 2003), field notes capture the researcher's evolving knowledge and insights regarding the observed context. In this study, field notes complemented observations and video recordings, providing additional perspectives in line with the interpretivist paradigm and qualitative case study design, which emphasise subjectivity and interpretation.

The field notes were structured into three sections: 1) basic course-related information (date, time, number of students, and class duration), 2) detailed observations of classroom actions and behaviours, and 3) personal comments and reflections. This three-part structure, recommended by Cowie (2009), ensured systematic documentation of classroom events. Guided by overarching research questions yet open to capturing unexpected events, as suggested by Copland (2018), the field notes ensured the validity of observational data while remaining receptive to emergent insights. They documented both anticipated and unforeseen occurrences, enriching the qualitative analysis process.

Field notes served as a secondary self-check for my observations, guiding data processing prior to analysis. While they did not report direct data, they were crucial in shaping the research approach and ensuring thoroughness in data collection. Table 4.2 presents an overview of the observational data, with highlighted rows (weeks 10-15) indicating lessons focused on argumentation.

Table 4.2

Classroom observation overview

Week	Date (2022)	Observation and field note	Video recording	No. of Students	Class time (hour/minute)	Weekly Objective / Content	Note
1	13 Jan			-	n/a	Class introduction and housekeeping information	Ethical approval (ERGO II) pending
2	20 Jan	✓		27	2.59	- Unit 1: Paraphrasing - Paraphrasing techniques, English parts of speech, sentence structure	Consent forms pending *The research was invited to introduce the project and

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							<i>observe the class but there was no recording.</i>
3	27 Jan	✓		27	2.58	Paraphrasing skills	Consent forms pending
4	3 Feb	✓	✓	26	2.32	Paraphrasing skills and exercises	
5	10 Feb	✓	✓	29	2.17	- Paraphrasing practice (group work) - Classwork 1 (in-class 45-min Individual paraphrasing test)	
6	17 Feb	✓	✓	23	2.18	Unit 2: Summary writing	
7	24 Feb	✓	✓	24	2.31	- Summary writing - Main idea and paraphrasing main idea exercise	
8	3 Mar	✓	✓	23	2.35	- Group work: main ideas and paraphrasing skill practice - Components of summary: summarizing skills	
9	17 Mar	✓	✓	29	2:06	- Reading task: understanding main ideas of different paragraphs of a text - Summary writing task	
10	24 Mar	✓	✓	24	2.47	Unit 3: Controversial Issues	
11	31 Mar	✓	✓	24	2.53	Writing position statements and counter arguments	
12	7 Apr	✓	✓	23	2.58	Argumentative essay structure: writing pro arguments and support	
13	21 Apr	✓	✓	27	3.05	- Final examination essays discussion - How to look for reliable sources for argumentative essay topics - Discussion of pros and cons of Kra Canal Project	
14	28 Apr	✓	✓	26	3.04	- Planning for an argumentative essay - Discussion practice: Twitter (Pros and cons) - Post-discussion writing	
15	5 May	✓	✓	28	2.24	Group oral discussion presentation	Part of final examination (spoken argumentation)

In summary, the use of classroom observation provided a robust framework for examining the development of criticality and discussions in the EAP classroom. Field notes further enriched this approach by capturing detailed classroom events, behaviours, and researcher reflections, ensuring a comprehensive understanding of the observed phenomena. This combination of methods facilitated a thorough and nuanced analysis of the classroom dynamics and critical engagement.

4.4.2 Semi-structured Interviews

Interviews were used to explore participants' perceptions of criticality, argumentation, and their disciplinary practices, including knowledge construction and challenges. Interviews are a powerful research method in qualitative inquiry, allowing experiences, insights, and abstract thoughts to emerge. Importantly, interviews are essential when

you want to find out what people know, believe, or feel about language-related matters; when you want to document their personal histories and explore their present circumstances; when you want them to comment on hypothetical scenarios, explain their motivations, and describe their imagined future" (Prior, 2018, p. 225).

This aligns with the present study's objectives, focusing on individual perceptions of criticality in relation to argumentation in this context. Since these 'realities' differ according to experiences, beliefs, and attitudes that cannot be observed, interviews play a key role in documenting this type of data.

The hallmark of using interviews in research is the co-construction of knowledge between people, including the researcher. Kvale (1996, as cited in Cohen et al., 2018) argues that knowledge emerges through the exchange of ideas, embodying "an interchange of views" (p. 506). Cohen et al. assert that interviews offer flexibility in capturing data through "multi-sensory channels" and encourage spontaneity in exploring "complex and deep issues." Interviews can be directive or non-directive (Richards, 2003). Directive interviews are guided towards specific objectives, while non-directive interviews allow new data and insights to emerge. However, as Richards suggests, a completely non-directive interview is practically non-existent.

Interview methodologies include structured, open, and semi-structured interviews. Structured interviews aim for standardised responses and specific information (Richards, 2009, p. 184) but may lack depth. Open interviews collect rich, detailed data without predetermined questions but can produce excessive and sometimes irrelevant data. Richards (2003) recommends structured approaches to explore specific inquiries and compare different viewpoints (p. 64). This has led to the popular use of semi-structured interviews in applied linguistics, which balance predetermined topics with flexibility to capture nuanced data (Dörnyei, 2007; Richards, 2009). This format combines elements of both structured and open interviews, guiding the conversation while allowing respondent input.

To facilitate effective semi-structured interviews, researchers should prepare an "interview guide" to delineate key topics of inquiry. In this study, interview guides were developed for EAP instructors and political science lecturers. These guides include both structured and open-ended questions, exploring topics such as EAP practice, argumentation effectiveness, and

identified challenges. Open-ended questions delve into broader aspects such as course experiences, thoughts on online learning, and additional comments. This sequential approach, starting with open questions followed by structured inquiries, fosters a conversational atmosphere (Richard, 2009).

To ensure the validity of the interview questions, the initial draft of the interview guide underwent scrutiny by the supervisory team to enhance its effectiveness. Given that all the interviews were conducted in Thai by myself, the interview guide was piloted with an experienced Thai university lecturer teaching at the tertiary level. This pilot phase assessed the clarity and natural flow of the conversation with Thai respondents, leading to further adjustments to optimise the interview guide for subsequent use. Some limitations of the initial draft of the interview guide included potential lack of clarity in certain questions, which might have led to misunderstandings. Additionally, the first draft had a limited range of topics and some questions that lacked a natural flow, which was addressed during the pilot phase to optimise the guide for subsequent use. The interview guide is provided in Appendix B.

In conclusion, interviews in this study are integral for understanding participants' perceptions and experiences, providing rich and insightful data that complements observational findings and contributes to a comprehensive understanding of the nature of criticality development in the research setting. More details about the interviews are provided in the following section.

4.5 Data Collection

To reiterate the mode of teaching and learning, the EAP course during the time of fieldwork was conducted on a virtual platform until the end of the academic year due to the Covid-19 pandemic. Thus, all the video-recordings of the class were undertaken through the recording function equipped with the video-conferencing programme—Zoom. This shaped the overall nature of data collection of the present study which was virtual for both classroom observations and interviews. I was familiar with the research context and knew the EAP teachers and one political science lecturer, but did not know the student participants in the EAP course and the other two political science lecturers.

Before conducting fieldwork, I first informed Oranee (pseudonym), who was also a convenor of the EAP course, and the students about the research background, research aims and objectives, and ethical rigour related to anonymity and confidentiality of the data used via the Participant Information Sheet (Appendix C). Consent forms were then distributed to all participants before the data collection took place (Appendix D). The participation was entirely voluntary. All the participants were informed that they can ask to see the research reports

(anonymised) and that the researcher was happy to share this information with them. During the interview phase, eight political science lecturers were approached to participate, resulting in four agreeing initially. However, during the final phase, only three responded and took part in the interviews. For student interview, multiple attempts were made to reach out to students during and after the fieldwork, but only one student ultimately participated. This limited student participation critically led to the decision to exclude student interviews from the present study.

For classroom observation, the EAP II course began in January 2022, during which the ethical approval process (ERGO II) at the University of Southampton was pending. Therefore, the first week was not observed. However, I was invited to introduce the project and answered questions from students during this week. Once ERGO II approval was granted the following week, consent forms were accordingly sent out, and I was invited to join the second week's class without video recording. From the third week onward, after receiving all the consent forms, I recorded the classes with my microphone and camera off. The virtual classroom environment allowed me to minimise my presence and efficiently take field notes by manually jotting down observations while observing the class on my computer screen. My role as a participant observer enabled me to view classroom practices from a third-person perspective, helping to maintain objectivity. Recordings were saved in a dedicated, password-protected folder for later review and transcription.

For teacher interviews, all the interview of the present study were conducted on a virtual video conference programme due to the current mode of teaching and learning during the pandemic and the participants' preference. Two interviews with political science lecturers were conducted in May and July, 2022 in Thailand. The rest of the interviews were conducted in June 2023 in the UK. I also found it quite challenging to arrange interviews during the fieldwork because the participants were busy with their workloads. However, post-class interviews can at least ensure that the participants had engaged in the course in as much extended period of time as possible. All the interviews were conducted in Thai and video recorded for transcription and data analysis.

Another key data source was the final examination in argumentative writing. To access this confidential data, I obtained permission from the language institute at the university after writing an official approval letter. A few months after the examination, the course convenor provided the argumentative essays and ensured I had all necessary information. Additional relevant curriculum and instructional materials were collected, including course information from the university's websites, EAP syllabi, textbooks, reading texts, activities, exercises, and assessment criteria. Political science lecturers also shared curriculum documents. Data

collection occurred from January 2022 to August 2023. The following section outlines post-data collection processes, including transcription and analysis.

4.6 Data Transcription

Both the interview and observational data went through transcriptions in order to be analysed further. This is the process when actual data are transformed into texts, so data transcription is key to understand the collected data through textual formats and is key to data interpretation. Data transcription is not entirely separate from the data collection but was part of what Dörnyei (2007) calls “iterative process” in qualitative research in which the procedures can be “nonlinear” (p. 243).

The most important consideration in selecting the appropriate transcription convention depends on the research objectives which determine the level of detail in the transcription (Bailey, 2008). According to Dörnyei (2007), researchers can actually invent individualised formats that fits with the research purposes. The present study follows a three-stage process of transcription including before, during, and after transcription. The before stage involves data familiarity. As the only person who undertook the transcription, I listened to the recordings to familiarise myself with the data. Then in the second stage was the actual transcription process in which, for several months, I went through the recordings many times with pausing, slowing down, and playback where necessary. To ensure the accuracy of the translation, after completing the initial translation, I reviewed the transcripts multiple times, checking them against the original recordings to ensure that the content was faithfully represented. This was further verified through contextual checks, ensuring that the translated text remained aligned with the specific context of the study. Finally, I consulted with colleagues familiar with both languages to verify certain key terms and ensure the translation's accuracy. The final stage involved checking that all transcribed texts are correct representations of the recordings including all the spelling/grammar checks and data accuracy.

Regarding transcription conventions, the present study adopted two levels of transcription to align with distinct research objectives and the nature of the collected data. The detailed transcription of observation data aimed to capture nuances such as pauses, overlaps, and contextual events, providing a comprehensive portrayal of classroom interactions in the EAP course (Appendix E). This level of detail was crucial for analysing the dynamic exchanges between teachers and students, highlighting the subtleties of instructional practices and student responses. Conversely, interviews were transcribed using a more simplified convention focused on extracting and presenting the content of participants' statements. This approach prioritised clarity and directness, facilitating the identification and analysis of key themes and

perspectives expressed by interviewees. By adopting these two transcription levels, the study aimed to balance the depth required to understand classroom dynamics with the clarity necessary for interpreting interview data effectively.

4.7 Data Analysis

This section outlines the organisation and analysis of data from observations, interviews, and argumentative writing. The analysis aims to scrutinise the multifaceted nature of criticality development through argumentation in the EAP course. As a qualitative case study, the priority is "in-depth, context-specific, rich, subjective data," with the researcher as the principal instrument, ensuring "fitness for purpose" is central to the data analysis plan (Cohen et al., 2018, p. 643). Therefore, qualitative analysis is an iterative process occurring both concurrently with data collection and towards the research's conclusion (Cohen et al., 2018). It is "neither a distinct stage nor a discrete process" (Richards, 2003, p. 268). This allows for continual refinement and adjustment.

Scholars recommend a flexible but structured approach to qualitative analysis. Wolcott (1994, as cited in Richards, 2003) outlines three overarching stages: description, analysis, and interpretation. This process involves describing the data comprehensively, exploring essential features and their interrelationships, and discerning underlying meanings and implications. Similarly, Richards (2003) categorises qualitative analysis into discovery, analysis, and interpretation, highlighting the progression from data exploration to deeper understanding. At the discovery level, the researcher engages directly with raw data to determine what constitutes evidence. At the analysis level, initial patterns are identified through categorisation and coding. Finally, the interpretation level involves validating the data analysis to draw robust conclusions. Additionally, Richards (2003) advises qualitative researchers to ensure that their representations correspond to the phenomena encountered, identify any gaps in their analysis, ensure consistency, and apply rigorous procedures for data collection and categorisation.

Qualitative data analysis is a recursive, non-linear, messy, and reflexive process (Cohen et al., 2018, p. 644). Therefore, the present study's data analysis was an ongoing process conducted throughout data collection, presentation, and interpretation. The analytical strategies are divided into two parts. First, thematic analysis of qualitative data from interviews and observations addresses criticality conceptualisation and the nature of criticality development through argumentation and in-class discussions and practices. Second, the analysis of argumentative essays from the final examination uses the Toulminian analysis and appraisal analysis. Data from institutional documents serve as supporting evidence for thematic analysis,

aiding in identifying issues related to criticality development and providing data triangulation. The following sections discuss these two analytical strategies in more detail.

4.7.1 Thematic Analysis

The present study employed thematic analysis to examine observational data and semi-structured interviews through video recordings. This approach, grounded in inductive analysis principles (Thomas, 2003), involved open coding to allow themes to emerge naturally from the data. The analysis was guided by the research objectives, focusing on understanding participants' experiences and perspectives related to criticality and EAP instruction, as well as the classroom dynamics that reflected criticality in argumentative practice. While the initial stages of coding were inductive, the findings were later interpreted in light of Johnston et al.'s (2011) developmental framework for criticality during the discussion phase, allowing the study to connect its results to broader theoretical perspectives.

As its name suggests, thematic analysis involves creating 'themes' inductively from data patterns (Braun & Clarke, 2006, 2022), which aligns well with the qualitative data from classroom dialogues, teacher interviews, and classroom observations. The themes reflect underlying theories and emergent data, making thematic analysis an effective framework for interpreting complex, qualitative data. Its inductive nature is particularly beneficial for qualitative case studies, allowing the researcher to identify underlying ideas and assumptions in verbal interactions and observational notes (Peel, 2020).

In the context of this study, which explores the nature of criticality development in the EAP course, thematic analysis is particularly fitting for several reasons:

1. *Systematic Exploration:* It systematically explores the perceptions and instructional approaches of both EAP and political science teachers, unveiling how these educators conceptualise and implement criticality and argumentation from language teaching and disciplinary perspectives and practices.
2. *Nuanced Insights:* It accommodates abstract concepts and ideas, capturing the multifaceted nature of classroom interactions and teacher-student dialogues. By integrating both interview and observational data, it provides a nuanced understanding of how argumentation and criticality are perceived and taught, highlighting the tensions and complexities involved in the development of criticality.
3. *Contextual Integration:* The flexibility of thematic analysis allows for the incorporation of various data sources. Educational settings are complex and influenced by numerous contextual factors, including institutional policies, curriculum frameworks, and socio-

cultural dynamics, which thematic analysis helps to capture in its investigation of criticality in practice.

Moreover, the study adheres to the concepts of scope and granularity (Hennessy et al., 2020) in its thematic analysis. Scope involves selecting data types relevant to the research objectives, while granularity refers to the level of detail in the analysis. By systematically exploring relevant data types, the study can delve into the nuanced perceptions and instructional approaches of teachers (scope). This detailed examination, achieved through high granularity, allows for a thorough understanding of individual and collective teaching practices. Scope also guides purposive sampling, ensuring that data both supported by existing literature and those presenting contradictions or nuances are included. The "what/how" system (Watts, 2014) was employed to engage with the data from the participants' perspectives. This selection process defines the boundaries of what data will be examined to capture the complexity of the phenomenon under investigation.

Nuanced and subtle insights were gained by closely analysing specific classroom interactions, teacher-student dialogues, and the complexities and tensions in teaching argumentation and critical thinking. Contextual integration further enriched the analysis by considering various data sources, such as curriculum documents, which provide additional layers of context. The level of granularity in this integration was adjusted based on the research questions, allowing for a comprehensive understanding of how broader educational contexts influenced teaching and learning processes. This combined approach ensured that the study addressed its research objectives critically and effectively, providing a deep and contextually informed understanding of criticality development in this EAP context.

The present study followed Peel's (2020) six-stage analytical model as a general guideline for both interview and observation data. However, to provide additional detail and refine the analysis, Williamson et al.'s (2018) structured steps were integrated into each of Peel's six stages, offering a more granular approach to coding and theme development. The combination of Peel's broad framework and Williamson's detailed stages allowed for a systematic, iterative process that captured both broad themes and the nuanced variations in participants' perspectives. The following outlines the steps of thematic analysis as applied to both interviews and observations:

1. **Data Collection:** Gathering the necessary data from classroom observations and interviews. Both frameworks emphasised the importance of gathering rich, contextual data through multiple sources to ensure that key insights were captured comprehensively. Williamson's structured steps, like reading and note-taking, were

particularly valuable at this stage for capturing the broad range of information from the data.

2. **Engagement with the Data:** Familiarising oneself with the collected data and transcribing it as needed. Williamson's initial step here of note-taking plays a crucial role in the early stages of engagement, where preliminary ideas, key concepts, and patterns from interviews and observations were first captured. These notes helped in forming initial understandings that would be revisited as the analysis unfolded.
3. **Coding the Extracts:** Identifying initial codes from key data relevant to the research focus and objectives. In this stage, Williamson's emphasis on coding and refinement proved critical. By systematically coding the data and refining these initial codes, additional insights were generated, and variations in the data were more clearly identified. Williamson's process of subsequent transcripts being coded ensured that the analysis was thorough and increasingly nuanced with each round of coding.
4. **Generating Code Categories:** Categorising the coded data to form distinct categories. Williamson's step of category development ensured a rigorous and iterative approach to developing meaningful categories. After an initial review of the data, recurring themes were organised into categories, with attention to refining these categories by incorporating new insights as they emerged. This stage helped solidify the thematic foundations for deeper analysis.
5. **Conceptualising Themes:** Interpreting themes based on the categorised data, making connections with underlying theories, and exploring meaningful associations between themes. Williamson's comparison and adjustment step supported this stage by facilitating re-evaluation of categories and adjusting them to reflect evolving understandings. This allowed for the integration of a more coherent and consistent structure for the emerging themes. The refinement and comparison ensured that themes were robust and well-defined.
6. **Contextualising and Representing Findings:** Presenting the interpretation of themes as research findings and identifying any connections among themes. Finally, Williamson's connection and linkage stage played an important role in contextualising the findings. By exploring connections and linkages between categories, overarching themes and patterns were identified, ensuring that the findings were presented with clarity and coherence, while also revealing complex relationships between the data and the broader research context.

The importance of context in thematic analysis, aligning with interpretivism, is underscored (Coffin & Donohue, 2012), which allows for deeper insights and a more comprehensive analysis of the phenomenon (Maxwell, 2009), particularly in a qualitative case study.

The coding process is central to this analytical model and serves as the foundation for identifying patterns of meaning in the data and establishing a central organising concept (Clark & Braun, as cited in Peel, 2020). Coding contributes to the process of 'data extract,' wherein the researcher interprets the data and makes inferences (Peel, 2020). This analytical model also resonates with inductive analysis procedures outlined by Thomas (2003), a systematic method to distil extensive raw text data into a succinct format, crucial for the present study on criticality development. It focuses on condensing data while establishing clear links between research objectives and findings, ensuring transparency and justification in interpretations. This approach facilitates the development of models or theories about underlying structures evident in the data, complementing my inductive coding process. By applying Thomas's framework alongside thematic analysis, I systematically categorised and interpreted data to uncover themes and patterns that contributed to understanding how critical thinking is enacted and nurtured.

The present study underwent three main stages in data coding, data categorisation, and theme development for both interview and observational data:

1. **Initial Coding (Inductive):** This stage involved the initial examination and coding of raw data. Inductive coding focuses on identifying patterns, themes, or concepts directly from the data itself, without preconceived categories or frameworks. This step corresponded to the process of discovering and generating codes from the data, which was foundational in thematic analysis.
2. **Second-level Coding (Inductive):** After initial coding, second-level coding further refined the analysis by categorising and organising the initial codes into broader themes or categories. This phase was iterative, where codes were compared and grouped based on similarities and relationships found within the data. It supported the thematic analysis principle of identifying and developing themes that emerged organically from the data through an inductive process.
3. **Interpretation (Deductive):** The final stage involved interpreting the themes or categories in relation to the research questions. Although the thematic analysis began with an inductive approach to generate themes, this interpretive phase applied a deductive approach. Here, the identified themes were contextualised and explained within the broader theoretical framework, integrating the findings with existing research

and theoretical perspectives to provide deeper insights into the development of criticality in EAP for Political Science.

The observation data excerpts are numbered to indicate the week of the semester and the sequence within that week. For example, *Excerpt 12.3* refers to the third excerpt from observations conducted in Week 12, while *Excerpt 10.11* refers to the eleventh excerpt from Week 10. This system ensures clarity and traceability of the data sources throughout the analysis.

In implementing thematic analysis, the relationship between data and the conceptual framework guided data processing, categorisation, and interpretation. Grounding the analysis in the data itself ensured it was closely tied to participants' experiences, perspectives, and classroom phenomena. Thus, thematic analysis systematically examined both observational and interview data, portraying the qualitative dimensions of investigating the nature of criticality development in this EAP context.

4.7.1.1 Analysing Interview Data

As a qualitative case study, teacher interviews serve as a crucial component of data triangulation (Patton, 1999; Talmy, 2010). This methodological approach ensures that the study not only explores how criticality is enacted in practice but also delves into the underlying rationale, conceptualisations, and pedagogical decisions made by teachers.

The structured analysis of interview data provides a deep exploration of educators' perspectives and instructional strategies regarding criticality and argumentation. While the six stages outlined by Williamson et al. (2018) may appear technical, they share similarities with the six-stage data collection and analysis stages proposed by Peel (2020) previously. Both frameworks emphasise active engagement with the data, iterative category development, theme generation, and contextualisation. A sample of coding categories of the interview findings are provided in Appendix F.

In Table 4.3, the coding process illustrated in an interview excerpt aligns with the analytical stages of qualitative data analysis by systematically organising interview data into meaningful categories, refining those categories to capture nuanced insights, and ultimately identifying overarching themes that contribute to the study's research objectives.

Table 4.3

Sample of a coding process from interview data

Interview excerpt (0:32:15 Veena, a lecturer in International Relations)	Initial code	Core theme
<i>Honestly, it's somewhat similar to what I mentioned earlier about questioning common sense, such as concepts like Westphalia. We feel that it's straightforward, like when Westphalia created a new era that led to respecting religious differences. However, it raises questions about whether it's genuinely true. In terms of critical thinking for political science, it may involve continuous questioning. Still, the questions should come from an informed base because there's extensive reading, discussions, or debates. Critical thinking isn't just having an opinion or wanting to voice concerns; it involves questioning something profoundly. It might require stepping out of the comfort zone of how we've been taught, like in high school or elsewhere.</i>	Defining critical thinking as questioning	Conceptualising Critical Thinking and Criticality
<i>It can happen if you read widely and consider all perspectives. It's because many people, especially younger ones, might find themselves fascinated by ideas on the left side, like Marxism or communism, or they might feel a strong aversion to capitalism.</i>	Considering multiple points of view	Nature of Learning Inquiry in Political Science
<i>However, that aversion comes from somewhere; it's about questioning capitalism. Just saying you hate capitalism isn't critical thinking.</i>	Defining critical thinking as questioning	Conceptualising Critical Thinking and Criticality
<i>It means being able to justify why you see capitalism as something negative and whether you can present counterarguments to popular arguments in favour of capitalism.</i>	Presenting counterarguments	Role of Argumentation and Argumentative Discourse

I began by reading the transcribed interview and noting key ideas and concepts. In the provided excerpt, Veena highlights critical thinking in political science, focusing on questioning accepted ideas like the Westphalia concept and the importance of informed questioning through extensive reading and discussions. Following the initial review, recurring themes and topics guided the development of categories. Initial codes, such as "*Defining critical thinking as questioning*," "*Considering multiple points of view*," and "*Presenting counterarguments*," captured Veena's views on critical thinking and argumentation in political science. These categories were continuously refined to maintain coherence and relevance. The next step involved comparing Veena's perspectives with those of other interviewees to identify commonalities and contrasts. Themes such as "*Conceptualising Critical Thinking and Criticality*," "*Nature of Learning Inquiry in Political Science*," and "*Role of Argumentation and Argumentative Discourse*" emerged from this analysis.

Following the data coding and analysis, the thematic analysis of the interview findings were finalised into four core themes:

1. **Conceptualising Critical Thinking and Criticality:** Examining participants' understandings and perspectives on critical thinking and its manifestation within the context of EAP for Political Science.
2. **Nature of Learning Inquiry in Political Science:** Exploring the methods and approaches employed in teaching and learning within the discipline of political science, with a focus on inquiry-based learning.
3. **Role of Argumentation and Argumentative Discourse:** Investigating the significance of argumentative discourse and language proficiency in fostering criticality and effective communication.
4. **Challenges and Concerns:** Identifying the obstacles and considerations faced by educators in promoting critical thinking skills and navigating the complexities of argumentation in their instructional practices.

The qualitative analysis of teacher interviews provided rich insights into criticality and argumentation within the context of EAP for political science. Following a structured approach to coding and thematic analysis, I was able to identify key themes that illuminate participants' conceptualisations of critical thinking, approaches to learning inquiry in political science, the role of argumentative discourse and language proficiency, as well as the challenges educators face in fostering these skills. This methodological rigour not only enhances our understanding of these complex phenomena but also lays the groundwork for further exploration through the analysis of observational data.

4.7.1.2 Analysing Observation Data

Because the present study viewed the classroom as a dynamic environment crucial for understanding the perception, teaching, and learning of argumentation in EAP contexts, the primary criterion for selecting an analytical framework for the observation data was its ability to capture the complexity of classroom dynamics and pedagogical approaches to argumentation. The study emphasised examining classroom interactions and learning opportunities related to the teaching of argumentation. Furthermore, by observing the language features and patterns in argumentation that teachers prioritised, the study analysed how these elements influenced pedagogical strategies and, in turn, informed the nature of criticality in this setting. Through thematic analysis, the study identified key themes and patterns that emerged from the observed practices and interactions, providing insights into the implicit and explicit ways teachers facilitated argumentation and critical thinking. Additionally, it contributed to understanding how the classroom environment, teacher-student interactions, and pedagogical approaches collectively supported the development of criticality.

Informed by the six-stage analysis (Peel, 2020), the thematic analysis process involved multiple stages of reading, coding, and refining to ensure that the data accurately represented the teaching and learning dynamics within the classroom. Initially, broad categories were developed to capture different aspects of discussions, and initial codes were identified and later re-read and categorised into 65 codes. These initial codes were then grouped into meaningful categories and developed into main themes. The coding process was iterative; therefore, the naming and merging of codes and themes were constantly conducted throughout the process.

Table 4.4

Sample of a coding process from observational data

Main theme	Sub-theme	Code	Code description
3. Mastering Rhetorical Power: Argumentative Techniques and Strategies	3.2 Constructing Critical Stance through Counterarguments and refutations	3.2.1 Co-constructing meanings of counterarguments	1) The extended turns involve four students exploring the meaning of counterargument. The first student initially struggles to grasp the concept. The teacher provides scaffolding, but the student still doesn't get it. Further scaffolding is given, and another student suggests that counterargument is about people with different opinions. The discussion continues, involving two more students, leading to the co-construction of the meaning that addressing counterargument can show awareness of alternative viewpoints as a writer and remain "open for discussion." 2) The teacher and a student engage in a discussion about why a counterargument is insufficient. The specific counterargument discussed is that banning smoking restricts people's freedom of choice. The conversation likely explores why this counterargument is deemed insufficient in the context of the overall argument. (moved from a previous code: <i>Discussing insufficiency of counterargument</i>)
		3.2.2 Addressing a clear refutation: making counterargument incomplete	1) The teacher explains that refutation should be addressed by either stating that the counterargument is incomplete in certain ways and emphasises the need to make this very "clear."
		3.2.3 Elaboration of the interplay between refutation and counterargument	1) The teacher provides detailed explanations regarding the overall structure of argumentation, particularly focusing on the interplay between refutation and counterargument.

To illustrate, In Table 4.4, within code 3.2.1, there are two distinct data sets that contribute to the understanding of counterarguments. The first data set involves a detailed classroom interaction where four students, with the help of their teacher, collaboratively explored and defined the concept of counterarguments. This process highlights the iterative and supportive nature of learning. The second data set, originally coded separately as "*Discussing insufficiency of counterargument*," has been merged into 3.2.1 "*Co-constructing meanings of counterarguments*." This set features a specific discussion between a teacher and a student about why a particular counterargument (banning smoking restricts freedom of choice) could be considered insufficient. The decision to merge these codes was based on the shared focus of

both data sets on deepening the understanding of counterarguments, thereby reflecting a cohesive learning opportunity aimed at co-constructing this crucial argumentative concept. A sample of coding categories for the observational findings are provided in Appendix G

For subtheme 3.2 “*Constructing Critical Stance through Counterarguments and Refutations*,” there are a total of 10 codes that captures a process of teaching and learning these critical components of argumentation within the classroom setting:

1. Co-constructing meanings of counterargument
2. Addressing clear refutation: making counterargument incomplete
3. Elaboration on the interplay between refutation and counterargument
4. Explicit engagement with refutation and avoiding repetition
5. Requirement of supports for the counterargument
6. Refuting counterarguments through the lens of freedom of expression
7. Elaborating on and emphasising freedom of expression as refutation
8. Refuting counterargument on laptop preference
9. Same-sex marriage and conservatism as counterargument
10. Importance of sequencing in refutation

All the codes within this theme highlight the various ways in which counterarguments and refutations are discussed, scaffolded, and elaborated upon. Ultimately, the observational data in this study reveals three primary themes:

- 1. Crafting Effective Arguments: The Interplay between Argumentative Structure and Evaluation**
- 2. Critical Discussions, Perspectives, and Debate: Navigating Controversial Issues**
- 3. Mastering Rhetorical Power: Argumentative Techniques and Strategies.**
 - 3.1 Building Powerful Position through Introduction and Conclusion***
 - 3.2 Constructing Critical Stance through Counterarguments and Refutations***
 - 3.3 Reinforcing Pro Arguments through Evidence and Support***
 - 3.4 Critical Information Assessment and Source Reliability***

These themes reflect varied approaches to fostering criticality among students, emphasising skills in logical argumentation, thoughtful analysis of multiple viewpoints, and strategic use of rhetorical strategies to enhance argumentative effectiveness and depth of critical thinking. The empirical data from classroom observations serves as another crucial and practical aspect of the study's data analysis. In the next section, the analysis of student essays provides a pivotal extension to our understanding of the nature of criticality development by means of argument quality and effectiveness and utilisation of evaluative language in written argumentation.

4.7.2 Analysis of Argumentative Writing

In this section, the methodology employed to analyse argumentative discourse is outlined. This involves the analysis of argument quality and structure using the Toulminian analysis and the SFL-informed appraisal analysis on counterarguments and refutations to investigate potential linguistic patterns that can be used to express criticality. Samples of the Toulminian and appraisal analyses of students' argumentative essays are provided in Appendix H.

4.7.2.1 The Toulminian Analysis

The analysis of argumentative discourse based on Toulmin's model provides a structured framework for assessing the effectiveness and strength, hence quality, of arguments. This serves as first-level analysis into the argumentative writing prior to the analysis of appraisal. The present study assessed, where applicable, the following elements in students' argumentative discourse:

- **Claim:** The main proposition or statement made in an argument. This also refers to the stance that the students chose to take in their argument.
- **Data:** All kinds of evidence and/or reasons used to support the claim.
- **Warrant:** Underlying assumption or reason that connects data and claim.
- **Backing:** Additional justification of the warrant that helps strengthen the connection between the data and the claim.
- **Qualifier:** The degree or scope of certainty applied on the claim. This can determine whether the claim is tentative, conditional, or absolute.
- **Rebuttal:** Counterarguments and/or opposing viewpoints. This can acknowledge possibilities of objections to the claims. This shows that the student has some level of awareness of different points of view.

This structured approach to argument analysis offers a comprehensive and systematic way to examine different elements in the students' argumentative writing. The Toulminian analysis was applied to all the six elements of argumentative essay: introduction and position statement, counterargument and support, refutation and support, two pro arguments with support, and conclusion. For the purpose of comparison, the findings from high-scoring group and the low-scoring group were analysed and compared to scrutinise their effectiveness in argument building. Importantly, the Toulminian analysis complements appraisal analysis by first understanding the structural components of arguments, enabling a deeper exploration of how students use language to evaluate and engage with different perspectives—a critical aspect of criticality development.

While the Toulminian analysis offers a structured approach to analyse argumentative writing, it is not without limitations. In reviewing student essays, adherence to this model could result in formulaic arguments rather than deeper critical insights. This suggests that while useful for evaluating argument coherence and support, the Toulminian analysis may not fully capture the subtle development of critical thinking. Despite this, it remains a valuable tool for systematically evaluating argument quality of written productions. It helps dissect essential components, providing a detailed view of how students construct well-supported arguments, engage with counterarguments, and synthesise perspectives. This makes it a valuable tool for understanding criticality through written argumentation, aligning with the research context's need for a robust analytical framework to evaluate argument quality comprehensively.

In the following section, I discuss how the present study examined argumentative writing by drawing on a theoretical perspective, the Onion model (Humphrey & Economou, 2015), which informs the analysis of appraisals (Martin & White, 2005).

4.7.2.2 Analysing Appraisal Resources in Counterarguments and Refutations:

Understanding how students develop critical discourse in argumentative writing is integral to this investigation. Informed by SFL, this study utilised the appraisal analysis framework (Martin & White, 2005) to examine how students convey attitudes, engage readers, and modulate the intensity of their expressions while advocating for or against the inclusion of same-sex relationships in primary school education based on the prompt in the final examination. The study therefore examined the analysis of counterargument and refutation through the lens of systemic functional linguistics (SFL) and the Onion model (Humphrey & Economou, 2015). By applying the SFL-based appraisal framework, which focuses on interpersonal meanings and evaluative language resources, the study explored how students strategically use language to persuade and critique within their written arguments.

The Onion model underscores that achieving a "critical" discourse involves not only presenting a stance but also challenging it by engaging with alternative viewpoints and effectively refuting counterarguments. This analytical approach not only unveiled the rhetorical strategies employed by students but also revealed potential critical language patterns used to express criticality within the academic context of Political Science.

In line with the research objective and the analysis of critical discourse of counterarguments and refutations or rebuttals (Humphrey & Economou, 2015), the analytical guideline presented in Table 4.5 was used to examine the argumentative essay. The appraisal analysis is, therefore, essential for examining how students strategically employ linguistic resources to construct persuasive arguments and engage in critical discourse. By focusing on counterarguments and

refutations, these rhetorical functions highlight the strategic use of language in robust rebuttal and offer insights into the complex interplay of counterarguments and refutations within argumentative discourse.

Table 4.5

Appraisal analysis of argumentative discourse

Appraisal element	Sub-elements	Linguistic features and expressions (adapted from Martin & White, 2005)
Engagement	Monogloss	Resources for expressing singular and consistent viewpoint (e.g., <i>first-person pronoun, authorial voices, declarative statement</i>)
	Heterogloss	Resources for expressing multiple viewpoints and voices (e.g., <i>references and citations, quotes from external sources, reported speech, changes in perspective</i>)
Attitudes	Affect	Resources for construing emotional reactions and feelings of the writer (e.g., <i>emotional words including nouns, adverbs, and adjectives expressing sentiment</i>)
	Appreciation	Resources for construing the value or quality of things (e.g., <i>evaluative words describing positive/negative appreciation such as remarkable, great, inadequate, problematic</i>)
	Judgement	Resources for assessing behaviour based on normative principles (e.g., <i>words expressing endorsement or criticism toward something such as argue, believe, competent</i>)
Graduation	Force	Resources for intensification, comparative and superlative morphology, repetition, and scalar assessments (e.g., <i>the use of intensified lexis such as modality, adjectives and adverbs: slightly, greatly, small, large, somewhat, quite, crucial</i>)
	Focus	Resources for adjusting the strength of boundaries between categories, constructing core and peripheral types of things and for directing attention to something (e.g., <i>evaluative expressions such as notably, particularly, true, authentic, this/it</i>)

One limitation of appraisal analysis in understanding critical language patterns related to criticality in this context is its primary focus on linguistic features and interpersonal meanings within texts. While appraisal analysis provides insights into how writers position themselves and engage with their readers, it may not fully capture the nuanced socio-cultural and institutional factors that influence critical thinking and argumentation. Broader contextual elements such as educational policies, institutional norms, and socio-political environments significantly shape how criticality is expressed and perceived in academic writing.

To address these limitations in my study, I emphasise in the findings section how institutional contexts influence criticality in writing. By discussing specific examples where institutional factors may interact with appraisal resources to shape argumentative discourse and critical perspectives, I aim to provide a more comprehensive analysis. This approach underscores that while appraisal analysis offers valuable insights, a thorough understanding of criticality requires consideration of broader contextual factors beyond textual analysis alone.

4.8 Validity and Reliability

In this section, I address the critical issue of maintaining the validity and reliability of the present study. In qualitative inquiry, validity and reliability hold distinct meanings from those in quantitative, positivist research. Therefore, it is essential to discuss them separately to ensure clarity and systematic understanding. Within the interpretivist paradigm guiding this study, validity is understood as the attainment of understanding (Maxwell, 1992; Cohen et al., 2018), while reliability is conceptualised as trustworthiness (Lincoln & Guba, 1985; Rallis & Rossman, 2009). This section, moreover, discusses ethical and sensitive issues related to the participation of the study, how data were handled, the ethical approval process of the study, and how ethical rigour was maintained.

4.8.1 Validity as Understanding

Unlike quantitative studies, qualitative research approaches validity through aspects like drawing data from natural settings, contextual boundedness, detailed descriptions, and the involvement of researchers in the phenomenon being studied (Cohen et al., 2018). Researchers must strive for objectivity in data collection and presentation, aligning with Maxwell's (1992) concept of 'understanding' based on qualitative validity:

Not all possible accounts of some individual, situation, phenomenon, activity, text, institution, or program are equally useful, credible, or legitimate. Furthermore, the ways in which researchers make these discriminations do not pertain entirely to the internal coherence, elegance, or plausibility of the account itself, but often refer to the relationship between the account and something external to it – that is, the phenomena that the account is about. Validity, in a broad sense, pertains to this relationship between an account and something outside of that account, whether this something is construed as objective reality, the constructions of actors, or a variety of other possible interpretations (p. 282-283).

Maxwell's realist perspective recognises the researcher as part of the research context, acknowledging that "we cannot step outside our own experience to obtain some observer-independent account of what we experience" (p. 283). This aligns with the interpretivist research paradigm and highlights the value of validity in qualitative research.

Maxwell (1992) proposes five categories of validity as understanding:

- Descriptive Validity: Ensuring the accurate and objective representation of the account.
- Interpretive Validity: Capturing and interpreting the meanings conveyed by participants.

- **Theoretical Validity:** The explanatory power of the theoretical framework used to explain the phenomena.
- **Generalisability** (more commonly referred to as 'transferability' in qualitative research): Applying explanatory power to other similar contexts, specific to groups or situations sharing common qualities with the study.
- **Evaluative Validity:** Justifying claims or interpretations made from the accounts.

These aspects of validity underscore that qualitative research design, data collection, and analysis must consider validity as a comprehensive concept. Researchers need to ensure the types of validity they employ are suited to the nature of their data and phenomena. Therefore, this study adopted the concept of validity as understanding throughout its design, data collection, analysis, and interpretation.

4.8.2 Reliability as Trustworthiness

The present study ensures trustworthiness to ensure the reliability of its findings. In qualitative research, reliability is often referred to as credibility, neutrality, dependability, transferability, and trustworthiness (Lincoln & Guba, 1985 as cited in Cohen et al., 2018). Cohen et al. describe reliability as "a fit between what researchers record as data and what actually occurs in the natural setting that is being researched" (p. 270). Trustworthiness involves competent practice and ethics (Rallis & Rossman, 2009). Competent practice includes adhering to established research guidelines and providing detailed descriptions of various viewpoints to ensure credibility. This aligns with the concept of 'face value,' where the study's findings make sense to readers' intuition (Rallis & Rossman, 2009). Credibility is further enhanced through rigorous data collection methods like triangulation and member checking, which incorporate multiple perspectives.

Ethical considerations are crucial for trustworthiness. Researchers must be sensitive to ethical issues, respecting participants' rights and well-being. By collecting data from diverse sources and seeking participants' approval for the interpretation of their data, the researcher upholds the original meanings and reinforces credibility. Competent practice also involves meticulous research procedures and the degree of generalisability (transferability) of the study. Rallis and Rossman (2009) emphasise rigour, referring to how transparently and reliably the research is conducted. While qualitative inquiry typically involves purposive sampling, the key is whether the findings are applicable to other similar settings. This involves assessing the potential usefulness of the study and providing rich descriptions of the context for readers to evaluate.

This study incorporated these aspects of reliability within the framework of trustworthiness, ensuring that the research was conducted transparently and meticulously, with considerations

for its applicability to other contexts. Ethical considerations remain a crucial component of trustworthiness, which will be discussed in the following section.

4.9 Research Ethics and Ethical Approval

Ethics in research refers to “what researchers ought and ought not to do in their research and research behaviour” (Cohen et al., 2018, p. 111) or “a matter of principled sensitivity to the rights of others” (Cavan, 1977, p. 810, as cited in Cohen et al., 2018). Ethical issues in qualitative research are particularly important as they often involve individual cases and sensitive matters (Cohen et al., 2018). Rallis and Rossman (2009) highlight three central ethical issues: privacy and confidentiality, deception and consent, and trust and betrayal.

Privacy and Confidentiality: Ensuring participants’ private information and identities are protected is crucial. Researchers must clearly and explicitly communicate their intentions, providing informed consent forms and obtaining participants’ consent (Cohen et al., 2018; Sterling & De Costa, 2018). Participants must be made aware of their right to withdraw at any time; however, they should also be informed that this right has practical limitations. For example, once data has been anonymised, aggregated, or incorporated into final analyses, it may no longer be feasible to extract individual data. Confidentiality ensures that data is not disclosed in a way that could identify participants (Cohen et al., 2018).

Deception and Consent: Informed consent is essential. Rallis and Rossman (2009) outline four principles:

1. Participants are fully informed about the study’s purpose and audience.
2. They understand what participation entails.
3. Consent is given willingly.
4. Participants can withdraw at any time without prejudice, with the caveat that data already anonymised or integrated into the study’s findings may not be removed.

Deception occurs when the true purpose of the research is concealed from participants. While some deception may be subtle, researchers should strive to be as open and honest as possible, maintaining positive relationships and ensuring no harm comes to participants (Rallis & Rossman, 2009).

Trust and Betrayal: Building trust is vital in qualitative research, particularly in methods like in-depth interviews and ethnographic fieldwork. Sustaining relationships with participants encourages open sharing. However, ending these relationships after data collection can be seen as betrayal. Researchers should consider the long-term impact on participants, especially

in sensitive research areas. Transparency and honesty are key to addressing these concerns (Rallis & Rossman, 2009). By addressing these ethical considerations, the present study upheld the highest standards of ethical research and ensured the rights and well-being of participants are respected throughout the research process.

The study prioritised clear communication of objectives and participant involvement from the outset. Participants were fully informed about the study's purpose, their role, and data usage, fostering trust and minimising the risk of perceived deception. Continuous open communication throughout the research, conducted through regular emails, online meetings, and accessible digital platforms, reinforced its collaborative nature and commitment to ethical conduct. By adhering to these principles of transparency and communication, the study aimed to uphold ethical standards and ensure that participants felt respected and valued. This approach not only mitigated the risk of perceived betrayal or deception but also contributed to the overall integrity and credibility of the research findings.

To ensure ethical standards, the University of Southampton Ethics Policy Statements provides five principles of ethical research the present study draws on:

1. Studies and research should be designed, reviewed and undertaken to ensure integrity, quality and transparency.
2. Participants must be fully informed about the research or study they are invited to participate in and their consent to take part must be made voluntarily, freely and without any coercion. Consents should be recorded, ideally in writing.
3. Risks should be managed so that harm and/or damage arising from the research is avoided or minimised wherever possible and measures should be taken to ensure that the benefits of research/study should outweigh any potential harm or damage caused.
4. The independence of the research/study must be clear, and any conflicts of interest or partiality must be explicit.
5. The same high ethical standards shall apply wherever in the world the study/research is undertaken.

(University of Southampton Ethics Policy, n.d.)

The ethical approval requests were submitted to the Ethics and Research Governance Online (ERGO) for review. The present study was subsequently granted ethical approval for the pilot study (classroom observation) in May 2021 and the current fieldwork (classroom observation, field notes, and interviews) in December 2021 (ERGO number: 81696). For the pilot observation,

I completed all the required information on the ERGO website and attached important files including the ethics application form, the participant information sheet, the consent form, and the email template I used to reach out to the participants. For the actual fieldwork, all the files were revised and submitted with an addition of the interview guide in which interview topics and questions were provided. The request was reviewed and I was informed that relevant documents for semi-structured interview were required. Therefore, the separate participant information sheet and the consent form for interview were also submitted. The approval was granted without revision.

4.10 Summary and Conclusions

The research design and methodology of the present study are geared towards examining the nature of criticality development through argumentation in the EAP for political science classroom. Given the complex, elusive nature of criticality, an interpretivist approach was adopted to embrace the diversity of perspectives and realities surrounding the phenomenon.

As a qualitative case study, emphasis was placed on the perceptions, practices, and written products within the English for Academic Purposes (EAP) and the Faculty of Political Science at the institution. This underscores the pivotal roles of participants, argumentative practices, and institutional context. To comprehensively investigate criticality development, multiple data sources were employed, including classroom observation, teacher interviews, and analysis of argumentative writing, all contributing to a better understanding of the nature of criticality development.

Classroom observations focused on the final five weeks of the EAP course, specifically on learning how to write argumentative essays under the controversial issues theme. Semi-structured interviews were conducted with both EAP instructors and political science lecturers to capture perspectives and conceptualisations on criticality in relation to argumentation. Analysis of argumentative essays was conducted using Toulmin's model and an appraisal framework, aiming to assess the quality of arguments presented in the essays and identify patterns of appraisal resources employed by students to convey attitudes and intensify expressions in their arguments.

By integrating these analytical approaches, the study sought to gain a comprehensive understanding of criticality development in the context of EAP for political science. Although student interviews were not included due to time constraints, the study effectively addressed its research objectives through a combination of classroom observations and analysis of argumentative discourse, reflecting actual classroom practices. Thematic analysis was applied

to observation and interview data, complemented by analyses of argument quality and critical discourse patterns.

In the next chapter, the findings are structured around the different data sources utilised in the study, namely, interviews, observations, and argument analysis. Each chapter presents insights into the nature of criticality derived from these sources. The ultimate goal is to contribute to understanding how criticality develops and is fostered through academic argumentation in this discipline-specific EAP setting.

Chapter 5 Interviews Findings

Based on the first research questions “**How are criticality and argumentation conceptualised and related? What role do they play given the nature of inquiry in political science?**”, this chapter presents key insights from interviews with three EAP teachers and three political science lecturers, using thematic analysis to examine their views on criticality. It unpacks their conceptualisations, teaching practices, and challenges in EAP and political science, progressing from abstract concepts to practical implications. The EAP teachers’ contributions shed light on how language instructors navigate the complexities of cultivating criticality and teaching argumentation especially in an academic setting where language proficiency is intricately tied to effective communication and academic success. The political science lecturers offer in-depth, disciplinary perspectives crucial for understanding criticality in their field. These participants contribute unique insights into the disciplinary challenges, priorities, and practices associated with fostering criticality in the field of political science.

This chapter unfolds into four core themes, each offering distinct insights:

1. Conceptualising Critical Thinking and Criticality
2. Nature of Learning Inquiry in Political Science
3. Role of Argumentative Discourse, Structure, and the English Language
4. Challenges and Concerns

By exploring these themes, the chapter presents a comprehensive conceptualisation of criticality development, learning inquiry in political science, the role of argumentation, and the challenges faced, ultimately contributing to the broader discourse on the nature of criticality development in this context.

The six teachers are referenced in pseudonyms and are coded in square brackets as follows:

Political science lecturers:

- Veena (lecturer in International Relations) [**Veena_PolSci**] (she/her)
- Unchalee (lecturer in Public Administration) [**Unchalee_PolSci**] (she/her)
- Pitak (lecturer in Government) [**Pitak_PolSci**] (he/him)

EAP teachers:

- Chaiwat (lecturer in EAP) [**Chaiwat_EAP**] (he/him)
- Anuchit (lecturer in EAP) [**Anuchit_EAP**] (he/him)
- Oranee (lecturer in EAP) [**Oranee_EAP**] (she/her)

In this chapter, the term "critical thinking" is employed interchangeably with "criticality" due to the participants not being acquainted with both terms in English during the interviews. Instead, the essence of criticality and critical thinking is conveyed in Thai as การคิดเชิงวิพากษ์, likely translated to 'critical thinking.' All the provided excerpts are English translations from Thai transcripts conducted by myself. Specific keywords, crucial terms, and notable sections of the interview excerpts are highlighted in bold. This aims to highlight significant points articulated by the participants, ease comparisons when necessary, and serve as guideposts to the most pertinent content.

5.1 Conceptualising Critical Thinking and Criticality

To begin with, the central theme "*Conceptualising Critical Thinking and Criticality*" encapsulates the complex dimensions of cultivating a critical mindset in political science. The theme is integral to the key interview guideline, serving as a lens through which insights from political science lecturers and EAP teachers are explored. In the first sub-theme, "*Critical Thinking as Questioning: Being Discerning and Informed*" educators emphasise the importance of discerning and informed inquiry, steering away from impulsivity. The second sub-theme, "*Critical Thinking as Depth and Analytical/Rational Thinking*," incorporates the various aspects of critical thinking, emphasising analytical and rational thought processes that contribute to profound analysis.

5.1.1 Critical Thinking as Questioning: Being Discerning and Informed

This sub-theme captures complex meanings and understandings of what may appear as simple as asking questions. Both the teachers from political science and EAP underscore the need for thoughtful inquiry and emphasise the multifaceted role of questioning in cultivating a mindset that goes beyond surface-level understanding.

All the political science lecturers mentioned asking questions as a means to gain more information, to evaluate the validity of it before making any judgement or taking sides. Pitak from political science compares critical thinking to the 'eh' (wait? or what?) button in a sense that one should be more discerning instead of being too quick to believe in something:

The 'eh' button. What and how, right? What's that? Why? Is it true? How? When they read something and then, they have to question it. Does it confirm? Does it have any assumptions or main arguments? What is the article arguing about?

[Pitak_PolSci]

However, this is not about asking just any questions. To be critical in this sense, it concerns a deeper, profound, and informed meaning. The political science participants highlight that critical thinking necessitates a deep questioning of the subject matter.

*Still, the questions should come from **an informed base** because there's extensive reading, discussions, or debates. Critical thinking isn't just **having an opinion** or **wanting to voice concerns**; it involves **questioning something profoundly**.*

[Veena_PolSci]

Additionally, being well-informed is essential for engaging in critical thinking. Pitak emphasises the need for sufficient information to support arguments and avoid superficial claims, such as asserting that politicians are corrupt without understanding the historical context and evidence. This highlights the intertwined nature of critical thinking and information, stressing the importance of a well-informed approach. Moreover, Unchalee notes that statistics and big data are crucial in policy analysis, and critical thinking involves asking questions to prompt deeper thinking and seeing connections.

The role of questions also resonates with the EAP teachers, but not as strong as the political science perspective:

*For **my kind of critical thinking**, it might come from **asking a good question**, like, um, identifying the logical gap or identifying plausible questionability, something like that. Like, **setting questions** about things that others may not have thought much about before, or something like that. ... **questioning an otherwise accepted belief**. Um, **I think this is critical thinking**. ... And it doesn't necessarily have to have an answer.*

[Oranee_EAP]

Contrary to a superficial level of critical thinking and hence asking “selfish questions” (this is explored in more depths in “Challenges and Concerns” theme later), Oranee reveals that the concept of being “well-informed” is further echoed by being “constructive” and based on “maturity” and “a profound understanding.”

Quite interestingly, the “questioning” and “being informed” theme appears to revolve around the consideration of multiple perspectives. The excerpt below implies that asking questions about diverse perspectives is essential for developing a well-rounded understanding in political science:

*Well, in terms of critical thinking, it's like they might only see **the perspective** they've actually read and perceived. They don't often **ask questions**. And what about the **other perspectives**, right? I mean, **the nature of it is that you have to understand every perspective**. Then, we, assuming we start to lean towards one direction, have to see that it's only one form of ideology. **That is the core idea of political science**, right?*

[Unchalee_PolSci]

Unchalee emphasises the necessity of considering multiple perspectives for robust critical thinking, highlighting that understanding diverse viewpoints is fundamental to political science's

core principles. This theme connects to the broader concept of creating a conducive learning environment that encourages dialogue and idea exchange, as echoed by Veena and Anuchit. Veena advocates for an interactive classroom environment that actively engages with diverse perspectives, while Anuchit underscores the role of discussions in stimulating critical thinking among EAP students.

While both groups emphasise the importance of questioning and analysing information, there are certain subtle differences in their approaches. Firstly, EAP teachers prioritise questioning logical coherence and assumptions, often without assuming prior knowledge. They emphasise developing skills in logical scrutiny and questioning accepted beliefs to foster deeper inquiry. In contrast, political science lecturers stress the importance of being well-informed through extensive reading and engagement with historical context. Their approach integrates disciplinary-specific knowledge into critical analysis, suggesting a greater emphasis on contextual understanding and the depth of information required for effective critical engagement.

Secondly, EAP teachers tend to focus on identifying logical gaps and questioning the validity of assumptions, aiming to stimulate deeper analytical thinking. On the other hand, political science lecturers seem to place more emphasis on broader questions that incorporate historical context and policy implications. This difference reflects varying perspectives on the types of questions that best facilitate critical analysis within their respective disciplines. Finally, while both groups advocate for fostering an environment that encourages critical discussions and considers diverse viewpoints, the data suggests that political science lecturers lean towards a more comprehensive approach to critical thinking that includes understanding multiple perspectives and historical contexts deeply. This contrasts with EAP teachers who stress logical coherence and rigorous questioning as foundational to critical thinking, potentially focusing more on immediate analytical skills development rather than broader contextual understanding.

5.1.2 Critical Thinking as Depth and Analytical/Rational Thinking

This sub-theme emerges as a distinctive facet within the broader conceptualisation of critical thinking, as elucidated by EAP teachers. Unlike the previous theme, participants do not explicitly mention forming questions but allude to the broader idea of analytical and rational thinking that facilitates deeper analysis.

Chaiwat articulates the inherent relationship between analytical thinking and critical thinking, asserting that without analytical expertise, effective debating and arguing become challenging.

He sees critical thinking as a method that supports diverse evidence and details, emphasising the necessity of understanding the purpose behind a text:

***Analytical thinking**, right? It's a relationship. Otherwise, you wouldn't be able to debate. ... Critical thinking is important; otherwise, you won't be able to argue, right? In this text, what's the **purpose**? Uh, the purpose or... what do they call it? The **purpose of the writers**. ... **Critical thinking** might be like the method of **supporting various evidence**, supporting **different details**. [Chaiwat_EAP]*

For Chaiwat, being analytical serves the purpose of elaborating or expanding on work by delving deep to uncover hidden meanings, aligning with the nature of arguments and debates (the argumentation theme is explored in more details in a later section). Anuchit further expands on this, portraying critical thinking as a hierarchical progression from basic understanding to the critical exploration and synthesis of information. The emphasis is on expanding ideas beyond factual information, marking the essence of critical thinking:

*Well, I think **it's about advancing**, you know, from the basic understanding that we have about a certain topic, something like that. Um, it's like **a hierarchy**. Like we know basic information, that it has this and that, right? And then, we sort of take the information we have and think about it, like, um, **expanding on it**. So, it depends on what it is, what it's about, right? Um, well, I think key is about **expanding ideas**. ... Um, **if we use only factual information, that's not critical**, right? It's like, information that is available, we can use it. Can we **use** it? Can we **analyse** it? Can we **synthesise** it? And, like, **expand** on it, it's critical thinking I think. [Anuchit_EAP]*

Both Chaiwat and Anuchit underline the importance of analytical thinking and going beyond basic understanding. They highlight that critical thinking involves analysing, looking deeper, understanding hidden meanings, and investigating information. The idea of going beyond the surface level of information and delving into deeper analysis is a consistent theme.

Furthermore, Oranee refers to “rational thinking” and construes it as part of critical thinking:

*It means it involves **rational thinking**, right? Rational thinking. Um, which I think **is not yet critical thinking**. Um, it's like thinking about **cause and effect**, right? Okay. Um, and also, like, the ability to support one's own opinions. [Oranee_EAP]*

Oranee suggests that rational thinking is a part of critical thinking but not entirely synonymous with it. For her, rational thinking involves considering cause and effect, along with the ability to support one's opinions. This introduces complexity, suggesting that while analytical thinking is integral, it may not independently constitute comprehensive critical thinking.

The excerpts highlight the importance of analytical thinking as a crucial component of critical thinking. Teachers, such as Chaiwat and Anuchit, emphasise the need to delve deeper into information, uncover hidden meanings, and analyse details to understand better and support arguments effectively. The notion of advancing beyond basic understanding and expanding on

ideas is central to critical thinking. However, Oranee introduces a nuanced perspective, suggesting that while analytical thinking involves rational considerations and supporting opinions, it may not yet constitute full-fledged critical thinking.

This sub-theme contributes significantly to the broader conceptualisation of criticality explored previously. This addition expands the understanding of criticality by underscoring that critical thinking involves not only asking probing questions but also rigorously analysing information, uncovering deeper meanings, and synthesising diverse perspectives. There are, however, potential points of contention. Firstly, there is a varying emphasis on questioning between political science lecturers and EAP teachers. Political science lecturers view questioning as a way to deepen understanding and engage with diverse perspectives, while EAP teachers see it as a tool for identifying logical gaps and challenging accepted beliefs. This difference reflects varying priorities in teaching critical thinking skills, with political science leaning towards a more exploratory and expansive approach, and EAP focusing on precise, analytical scrutiny.

Secondly, the depth of engagement with information differs between the two groups. Political science lecturers emphasise the necessity of being well-informed and understanding historical context to avoid superficial claims. In contrast, EAP teachers prioritise the logical coherence and analytical aspects of questioning. Additionally, political science lecturers' emphasis on understanding multiple perspectives and historical contexts suggests a broader, more comprehensive approach to criticality. On the other hand, EAP teachers focus on logical analysis and questioning, highlighting a potential tension between developing a wide-ranging critical understanding and honing specific analytical skills. This reflects the multifaceted nature of criticality is highlighted by the contrasting approaches of the two groups.

5.2 Nature of Learning Inquiry in Political Science

This theme inquires into the disciplinary approaches and perspectives that shape the field, providing a critical lens for examining the conceptualisation of criticality. This theme consists of four sub-themes:

1. Critical inquiry, Scepticism, and Thinking Beyond
2. Consideration of Multiple Perspectives
3. Profiles and Prospects of Political Science Students
4. The Importance of English in Political Science Education

5.2.1 Critical Inquiry, Scepticism, and Thinking Beyond

This sub-theme revolves around the notion that learning in political science involves a proactive and critical approach to information. It encourages students to question prevailing beliefs, challenge common assumptions, and delve deeper into the complexities of various topics.

In the first excerpt, Veena highlights the importance of scrutinising beyond surface-level inclusivity, such as simply including women in panels, and instead examining underlying structural changes. This notion of "thinking beyond" and having an "afterthought" aligns with the idea that criticality involves more than just questioning; it encompasses a deeper analysis and understanding of broader implications and systemic issues. This reflection on feminist contexts demonstrates how critical thinking extends into evaluating and challenging established norms and practices, reinforcing the need for persistent inquiry and scepticism:

*However, the text says that **it's necessary to go beyond just** including women in panels and avoiding underrepresentation. Simply including women isn't what matters here. ...But it's more like an **afterthought** just for the sake of having female speakers. It's like you have to try to locate all the time that oh women need to be in the critical camp or here is better. Things like that. There is the **need to think beyond** mere representation or quotas, but **scrutinise any structural changes** that may occur.*

[Veena_PolSci]

On a similar note, Unchalee emphasises the importance of becoming "qualitative researchers," advocating for a critical perspective that goes beyond the mere use of statistical tools. She stresses that students should understand the implications and potential biases inherent in quantitative data, encouraging them to critically assess how big data can influence democracy and inequality. This perspective on big data further solidifies the conceptualisation of criticality as not only an analytical skill but also an ethical stance, urging students to consider the broader societal impacts of their work.:

*One of the tools of management is statistics, you know, statistical numbers. Students have to study quantitative aspects. I want students to be, you know, **qualitative** researchers. I don't want them to just use tools **without being critical about them**. I want them to understand that numbers are not innocent. I will cover big data, and in the second half of the semester, it will be about big data. ... So I look for readings that are critical about **how big data might pose a threat to democracy or promote inequality in society**. ...*

[Unchalee_PolSci]

Moreover, the metaphorical reference to the academic work *Weapon of Mass Destruction* underscores the perceived magnitude of the issues related to big data, suggesting that, if misused, it can have severe consequences comparable to a destructive force. She encourages students not only to understand the tools at their disposal but also to critically assess their implications, particularly in the context of emerging areas like big data. This forms a combination of persistent questioning, deep analytical thinking, and a commitment to

understanding and addressing broader systemic issues. It is not merely about acquiring knowledge but about developing a critical mindset that is capable of evaluating, challenging, and rethinking established ideas and practices within the discipline.

The focus on qualitative research and scepticism towards quantitative data, however, may create tensions within the conceptual framework of criticality, potentially undervaluing the importance of statistical literacy and quantitative analysis. On one hand, it is important to recognise that qualitative data can also be manipulative, particularly when it relies on authoritative figures who may have hidden political agendas. On the other, quantitative data also provides a level of objectivity and precision that can help in making clear, evidence-based arguments. Integrating quantitative data with qualitative insights ensures a more balanced perspective on criticality development.

5.2.2 Consideration of Multiple Perspectives

The second sub-theme highlights the essence of political science education—encouraging students to delve into a diverse range of political ideologies and viewpoints. This theme underscores the importance of fostering independent thinking and informed judgment. It reflects the commitment within political science education to move beyond a monolithic approach and empower students to critically analyse various political ideologies. The excerpt below from Veena essentially captures the theme:

*...many people, especially younger ones, might find themselves fascinated by ideas on the left side, like Marxism or communism, or they might feel a strong aversion to capitalism. However, that aversion comes from somewhere; it's about questioning capitalism. Just saying you hate capitalism isn't critical thinking. It means being able to justify why you see capitalism as something negative and whether you can present **counterarguments to popular arguments in favour of capitalism**.*

[Veena_PolSci]

Veena (IR) connects to the concept of critical thinking by emphasising that simply expressing a dislike for capitalism is not synonymous with critical thinking. Critical thinking, in this context, involves the ability to articulate and justify one's perspective on capitalism while, importantly, presenting counterarguments to popular pro-capitalist views.

Unchalee (Public Administration) expands the theme of considering multiple perspectives by delving into a work in anthropology titled *Thinking Like a State*. The excerpt below highlights that students will explore the state's perspective and the idea that statistics are not neutral but rather reflect a particular individual perspective:

*And the process of measurement, which includes **some manipulation**. Trying to... And what is called "domination," it's a process of homogenising the population with something. This piece will argue about **the perspective of the state**. Why use the term*

"stats"? It is the science of the state, right? It's the science of those who manage the state, a modern state or something. This is somewhat historical.

[Unchalee_PolSci]

Unchalee underscores the argument that statistics are not objective truths but are, in fact, shaped by the perspective of those managing the state. Moreover, she connects this theme with contemporary relevance by mentioning the application of big data in public administration. This demonstrates the interdisciplinary nature of political science, urging students to understand statistics not only from a statistical standpoint alone but also from the broader perspective of political scientists.

The following excerpt by Anuchit (EAP), who was also a former political science student, vividly reflects his time at the Faculty of Political Science, recounting how the teachers at the faculty made a concerted effort to encourage students to explore various perspectives, both mainstream and non-mainstream, in all subjects:

*When I was studying at the Faculty of Political Science, it seemed like the teachers in my batch, around that time, in all subjects, were trying to **encourage students to see various perspectives**. Both the mainstream and non-mainstream views. Can you imagine? They attempted to make us **decide for ourselves**, use **our own judgment** about which path to take, things like that.*

[Anuchit_EAP]

Anuchit emphasises that, despite students being aware of the teachers' inclinations, the instructors consciously aimed to avoid bias, refraining from imposing their views as inherently good or bad. The excerpt suggests that the faculty aimed to present a balanced view and acknowledges that different perspectives exist, and allows students to form their own judgments.

The sub-theme adds a vital dimension to the conceptualisation of criticality in this context. It underscores the importance of exposing students to a diverse range of political ideologies and viewpoints, encouraging them to engage deeply with different perspectives and develop well-rounded, justified viewpoints via analytical skills integral to critical thinking. This approach aligns with the idea that criticality involves not just understanding different perspectives but also the ability to critically assess and articulate informed judgments. Furthermore, the application of big data in public administration showcases political science's interdisciplinary nature by emphasising how statistical analysis influences governance.

However, this sub-theme also reveals subtleties within the conceptual framework of criticality. While exposing students to multiple perspectives is essential, it may raise questions about the balance between breadth and depth in developing critical thinkers. There is a potential risk of fostering relativism, where the distinction between well-substantiated arguments and weaker ones becomes blurred. Additionally, even though educators strive to present information

without bias, their personal inclinations or preferences can still subtly influence how they present different perspectives to students. These considerations highlight the complexity of fostering criticality, suggesting that it involves not only engaging with diverse perspectives but also cultivating the ability to critically evaluate and synthesise information to form robust, well-founded critical judgments.

5.2.3 Profiles and Prospects of Political Science Students

This sub-theme elaborates the unique qualities, perspectives, and trajectories of individuals studying political science. Through the lens of educators and professionals in the field, several key aspects emerge. Firstly, Veena's observation captures students' keen interest and awareness of global issues, showcasing their engagement with the broader political landscape:

*In our faculty, we don't encounter many issues because students are usually **kept informed** about important global matters, such as protests, wars, Russia-Ukraine crisis, and other important events. **Most of them are quite interested in these issues.***
[Veena_PolSci]

Generally, it can be inferred that students in the faculty, particularly those in international relations, are actively engaged and “kept-informed” about global affairs. This aligns with the nature of political science education that often emphasises a broad understanding of the world.

From an EAP and former political science student perspective, Oranee's reflection on the changing nature of students and their increased interest in political topics aligns with Veena's emphasis on critical inquiry and questioning prevalent beliefs:

*They seem to be **more intentional in choosing something**, right? Political topics are like, um, more relevant to their lives. ... But one thing is that they (students today) seem to be **quite active**, right? Um, um, I admire the younger generation. ... there were more life experiences, um, studying political science is like **training to think**. It trains you to **be critical**, and it's **very encouraged** as a student of political science.*
[Oranee_EAP]

Oranee's observation suggests that students today are “more intentional” and “active” in engaging with political issues of interest, indicating a broader trend towards critical thinking and a proactive approach to learning.

This sub-theme is further echoed by Pitak (Government). It becomes evident that “the core ideology of political science,” as perceived by him, is centred around preparing students for a diverse range of roles and responsibilities in various sectors:

*What I'm trying to say is **this is the core ideology of political science**. So our students know they will be working in **public sectors**, government offices, work as policy analysts for different units, handle HR matters, or even become event organisers and engage in Corporate Social Responsibility (CSR). They may also work internationally in areas like*

development, human rights, politics, and governance.

[Pitak_PolSci]

This perspective emphasises the versatility and applicability of the skills acquired through political science education. Moreover, he underscores the skills that political science students develop, including the importance of “social skills,” indicating that political science students are equipped with a “higher sensitivity” and understanding of societal challenges.

Unchalee contrasts the academic dynamics between departments, emphasising the distinct focus on management in Public Administration compared to the more politically active International Relations (IR) where she studied. This highlights the internal diversity within academic institutions and underscores how departments adopt unique perspectives and priorities, adding a layer of complexity to the overall academic profile of her department.

The qualities and trajectories depicted in this subtheme subtly imply the nature of criticality in political science through several lenses. First, the active engagement of students with global affairs and political ideologies suggests a foundational understanding of diverse perspectives—an essential component of critical thinking. Second, the portrayal of students as proactive learners who actively seek to understand and engage with political topics underscores their capacity for independent inquiry and discernment. This proactive stance indicates a readiness to question prevailing beliefs and explore alternative viewpoints—a hallmark of critical thinking. Additionally, the emphasis on developing skills such as social sensitivity and adaptability speaks to the broader implications of criticality in preparing students for various roles in public service, policy analysis, and international affairs.

5.2.4 The Importance of English in Political Science Education

This final sub-theme sheds light on the pivotal role of the English language in the field of political science. The excerpts from the political science lecturers emphasise how mastering English is not just a linguistic skill but a gateway to accessing and contributing to global knowledge.

To begin with, Unchalee highlights the transformative power of English proficiency that allows individuals to transcend the limitations of Thai knowledge. The proficiency in English enables a broader connection to “globally recognised knowledge.” Veena's remark about political science not being solely about professional skills but also involving “reading skills that broaden horizons” suggests the central role of language skills to tackle a variety of texts in political science and hence constitute this theme.

Veena further underscores the centrality of English as the primary medium for political science education, particularly in International Relations (IR):

*So, this [English] is **quite important as a medium** because political science terms and teaching are mainly in English. ... That's because, for the most part, political science vocabulary is in English, and the textbooks are **predominantly in English**. For some, especially those that are considered classic scholars, students should **read original works**. ... It can be debated, but still, they have to read it. These are written **extensively in English**. Those IR theorists and others write in English. So, English becomes a relatively important medium. Moreover, there are many terms that are used in English (even when discussing in Thai).*

[Veena_PolSci]

This excerpt underscores English's critical role in political science education, especially in International Relations (IR), where it dominates terms, teaching, and textbooks. Proficiency in English is essential for engaging with original works by classic scholars and IR theorists, despite ongoing debates about the linguistic accessibility of classic works and the dominance of English in political science, which some argue might limit inclusivity and diversity of perspectives. Veena also highlights students' active participation in English-centric activities like youth and international conferences (e.g., YSEALI, Model United Nations), and debate clubs, integral to their learning experiences.

Within this sub-theme, the emphasis on English proficiency in political science education implicitly informs the conception of criticality by revealing its role in, again, accessing diverse perspectives and engaging with global discourse. Proficiency in English enables students to interact with a wide range of political theories, research, and debates that are predominantly available in English. This exposure is crucial for developing critical thinking skills as students navigate complex political issues and analyse different viewpoints articulated in English-language literature. Moreover, the requirement to read original works and engage in English-based activities like international conferences and debates underscores the ability to critically evaluate and articulate their own perspectives within a global context.

Nevertheless, there could be potential challenges associated with this reliance in English. For instance, this might marginalise non-native English speakers or limit access to diverse perspectives in political science literature that are not widely translated or accessible in English. This issue also raises questions about inclusivity and the dominance of English as a gatekeeper in academic discourse, potentially influencing what knowledge is prioritised and disseminated globally. Additionally, the emphasis on English proficiency might overshadow the development of critical thinking in Thai and languages other than English, restricting students' ability to engage deeply with political ideas in their native languages or in languages where their critical analysis skills are stronger. This can affect the scope and inclusivity of political science education and shape students' perspectives based on the availability of resources and materials primarily in English.

5.3 Roles of Argumentation and Argumentative Discourse

This third theme delves into the criticality framework by examining how argumentation shapes and defines critical thinking within political science education. By exploring the integral role of argumentation, this theme uncovers how argumentative practices contribute to fostering deeper understanding and engagement with complex political issues. Through various perspectives, practices, and considerations, the theme reveals the intricate relationship between argumentation and the development of criticality in an academic context.

5.3.1 Conceptualising Argumentation and Argumentative Inquiry

This sub-theme incorporates three key areas including 1) Nature of Argumentation and Argumentative Writing, 2) Being Persuasive and Convincing, and 3) Reinforcing Stance through Support.

Nature of Argumentation and Argumentative Writing

"Nature of Argumentation and Argumentative Writing" portrays distinctive characteristics and depth involved in cultivating argumentative skills within academic contexts, particularly in political science and English for Academic Purposes (EAP).

For EAP, while other subjects may involve opinion-based writing or general opinions, argumentative writing in this course, as Chaiwat describes, "goes deeper" and is "more intense." The distinguishing features include elements like "counterarguments" and "refutations" (which constitute as key themes across the findings), that require stronger evidence rather than relying on feelings alone:

*However, the difference lies in things like **counterarguments**, **refutations**, which are **characteristics of argumentative writing**. If we were to compare it with other subjects, they may involve opinion-based writing, paragraph writing, providing general opinions, and so on. But this course **goes deeper** and is **more intense**. So, it's deeper and more intense. It needs **stronger evidence than just feelings**.*

[Chaiwat_EAP]

Oranee also reflects the significance of these two key elements by highlighting the critical element in EAP for Political Science (EAP II) compared to an English foundation course at the university which was a pre-requisite of all EAP courses. While the basic course covers paragraph writing with a focus on aspects like topic sentences, the EAP course delves into more advanced topics, particularly in the third unit, which addresses controversial issues and argumentative writing. This, according to Oranee, is "the heart of the course," as it goes beyond a singular focus on language proficiency but extends to the development of approaches to "thinking" and "reading."

For political science, it centres on the foundational nature of argumentation that guides students to understand arguments as core elements substantiated with supporting details. Unchalee underlines the “core” of an argument and the importance of substantiating or backing up claims within a document. She clarifies that everything can be viewed as an argument, and students need to discern the purpose of an argument for a particular question:

*They have to learn that writing a paper is not like writing a high school report. You have to analyse right from the beginning to the end. Is that right? Everything, um, it has to come out after being thoroughly filtered. I mean, you have to **think and critically analyse** until the end. Then you can write it out. Is that right? Do you know that you will **argue about something**? Then you **structure the argument to end at your main point**.*

[Unchalee_PolSci]

Pitak underlines the paper's unity around a central point, stressing clear statements, cohesion, coherence, and communicating the paper's aim to the reader. He parallels his teaching approach with his doctoral studies, involving close readings and seminars to foster a classroom environment where students confront ideas, pose questions, express disagreement, and offer diverse perspectives in argumentation:

*Um, this **argument**. This is a **debate**. This is what they are interested in and then **pose questions to scholars**. So, how do you think? Well, each country is like, their background.. Oh Thailand is not like them at all. **This kind of confrontation of ideas**. Um, some people say, hey! I disagree. This is like, opposing what I've read. The facts are like this. **This is the kind of argument that happens**.*

[Pitak_PolSci]

Importantly, Pitak's description of engaging in debates and discussions, questioning scholars, and confronting ideas aligns with the broader theme of critical inquiry and thinking. His example of students disagreeing, posing questions, and challenging established ideas illustrates how questioning and critical thinking are integral components of argumentation within political science.

Being Persuasive and Convincing

The topic of being persuasive and convincing in EAP, as expressed by Anuchit and Oranee, underscores the distinctive nature of argumentative essays:

*For an **argumentative essay**, it has to be **stronger than an opinion paragraph or an opinion essay**. It needs **a purpose**, for me. It's about, well, **drawing others to believe** in what we think, um, without them necessarily having had any thoughts about it before. Um, it makes them believe in what we think. Why? Right? Because of that, the supporting details, those supporting details for your argument must be **very, very strong** and **convincing**. Um, the keywords for me in writing an argumentative essay are **persuasive** and **convincing**.*

[Anuchit_EAP]

*The word "**convincing**," convincing, right? And a good argumentative essay, when you read it, sometimes **it involves a feeling**. When you read it, it's like, um, it follows along.*

*Right? It's convincing because, for me, addressing the **counter-argument is crucial**. Like, addressing it to show that we know **how the opposing side thinks**. Um, we can **effectively refute**.*

[Oranee_EAP]

Both Anuchit and Oranee emphasise the importance of creating a compelling and persuasive argumentative essay. Anuchit highlights that the primary goal is to draw others to believe in the writer's perspective, even if they hadn't considered it before. He underscores the significance of "strong" and "convincing" supporting details to achieve this. Oranee further echoes the importance of being "convincing" in an argumentative essay and introduces the element of addressing counter-arguments.

Reinforcing One's Stance through Support

The topic of "Reinforcing One's Stance through Support" emphasises substantiating perspectives in argumentative writing. Chaiwat stresses articulating reasons with reliable and trustworthy details to strengthen arguments against brevity. Anuchit extends this by emphasising robust evidence and advocating for paragraph depth to ensure argumentative depth:

*Have the ability to refer back and forth to **trustworthy authorities** or **reliable sources** or **credible political figures**. In order to **support our standpoint**. Our own, um, this is important. And, um, well, the argument? It has to be strong enough. Oh! **The argument must be able to refute**. It must, um, not go off-topic. Um, well, that's quite common. Um, yes. Going off-topic too much is like, um, well, it's not good. So, students need to write within the scope, well, where they can argue about it, something like that.*

[Anuchit_EAP]

In Anuchit's excerpt, the mention of being able to "refute" underlines the importance of addressing counterarguments in argumentative essays. He highlights that an effective argument should not only present a persuasive case but also anticipate and counter opposing viewpoints.

The analysis reveals that both EAP and political science emphasise criticality through depth of analysis, evidence-based argumentation, and critical inquiry, yet they approach argumentation differently. EAP prioritises structural elements like counterarguments and logical coherence, which are foundational for developing students' logical scrutiny and critical thinking skills. In contrast, political science integrates broader historical and contextual knowledge, focusing on the overall unity and purpose of arguments. This dual focus suggests a tension between depth of analysis and breadth of knowledge integration: while EAP's structured approach may risk overlooking the broader contextual understanding emphasised in political science, the latter's integration of extensive subject-specific knowledge might challenge the rigorous analytical focus on structural elements seen in EAP. Additionally, the emphasis on emotional resonance in argumentation raises questions about balancing emotional appeal with intellectual rigour.

5.3.2 Argumentation Instruction and Assessment

This sub-theme of "Argumentation Instruction and Assessment" is established based on educators from both EAP and Political Science insights into their roles in guiding students through the intricacies of argumentative writing. On the one hand, Pitak focuses on guiding students in argumentative writing within the subject of Logic, Reasoning and Social Inquiry. The information of the course is then provided to shed light on the contextual background. The course description of "Logic, Reasoning and Social Inquiry" in the B.A. (Political Science) curriculum for first-year students, is outlined in the 2021 document:

*Introduction to logic, **critical thinking**, reasoning and **argumentation** for political scientists and social scientists, skills of reading, listening and note taking, research, and presentation of ideas and arguments in writing and making references.*

This course, taught by students' supervisors, introduces students to essential skills such as logic, critical thinking, reasoning, and argumentation tailored specifically for political scientists and social scientists. This information underscores the curriculum's commitment to cultivating a strong analytical foundation and encourages students to approach political science with a critical mindset.

In this regard, Pitak's emphasis is on raising issues related to logic and argumentation. While Pitak mentions improved writing skills, the context suggests a connection with logic and argumentation within political science:

***Argumentative writing**, I must say, falls under the subject of Logic, indeed. We have to guide the students, um, **summarise**, go watch a movie first. After summarising what they've read, **they'll come with a sheet and talk to us**. Like, hey, which part do you like? And which scenes do you like when watching a movie? Oh, did you jot it down? Can you remember? This person speaks like this. Did you see that scene? Did you see this scene? **We will raise these issues**.*

[Pitak_PolSci]

On the other hand, Oranee emphasises the purpose of the EAP course in helping students use language to express viewpoints and ideas critically:

*Um, like, this is something that comes with them. Um, well, this is kind of like our role in teaching English, right? It's like **providing tools for them**. Um, like, if they want to express their ideas in **a critical viewpoint**, how can they make it **effective**? Like, um, well, I think the purpose of this course is just to help students use language to express their viewpoints and ideas.*

[Oranee_EAP]

Even though this excerpt does not directly connect with any specific instruction or assessment practice, it shows how Oranee perceives the purpose of learning argumentation as equipping

students with linguistic “tools.” This underlines the role of language as a tool for effective expression in an academic context.

Anuchit emphasises practical writing skills such as grammar, paraphrasing, and integrating grammar with writing in the EAP course. His focus is on equipping students with techniques to effectively express critical viewpoints in argumentative writing. While Anuchit acknowledges that argumentative essays naturally involve thinking and analysis, the course syllabus lacks explicit emphasis on developing critical thinking skills. He suggests that critical thinking may be fostered indirectly through the process of writing and expressing personal opinions, expecting some development by the end of the course:

*Writing an **argumentative essay**. I think it's **unavoidable** that students have to **think, analyse, expand**, and something like that. Right? Because in the end, it has to become their opinion when they express it. Right? But, **it's not explicitly written in the course syllabus** that students have to, like, when they finish the course, they must have critical thinking or something like that.*
[Anuchit_EAP]

This practical aspect is further echoed by the assessment criteria of argumentative writing. While he highlighted the importance of being “persuasive” and “convincing” in the earlier theme, his additional comment suggests that the evaluation of argumentative essays might be more focused on technical components (such as inclusion of required elements, content, language, cohesion, and coherence) rather than a deep examination of how convincing or persuasive the arguments are. This practical perspective acknowledges the challenges or limitations in assessing higher-order thinking skills within the constraints of grading criteria.

The perspectives on argumentation instruction and assessment in EAP and political science reflect a spectrum of approaches. Pitak emphasises foundational skills like logic and reasoning through practical activities, focusing on direct skill development in argumentation for political and social science students. Oranee views argumentation in EAP as a means to equip students with linguistic tools for critical expression alongside language proficiency. Anuchit highlights indirect critical thinking development through argumentative writing, noting a tension between skill development and explicit promotion of critical thinking. However, these approaches also reveal potential limitations: Pitak’s focus on logic and reasoning may neglect broader critical thinking integration, while Oranee and Anuchit’s pragmatic approach to argumentative writing might insufficiently promote higher-order thinking skills within EAP goals.

The exploration of argumentation instruction and assessment in EAP and political science offers insights into how criticality is perceived and cultivated through varying approaches to nurturing analytical depth and rigor in student discourse. While these perspectives provide practical

strategies for teaching argumentation, they also highlight potential limitations in explicitly defining and promoting critical thinking skills.

5.3.3 Argumentative Discourse and Structure

In this section, the participants discussed the structure of argumentative writing used in the EAP course, the components of which include:

1. Introduction and Position Statement
2. Counterargument and Support
3. Refutation and Support
4. Pro argument 1 and Support
5. Pro argument 2 and Support
6. Conclusion

The participants shared insights on the importance of basics and guidance in crafting essays as well as the role of language and information stock. Whether allowing freedom or using mandatory assignments, the goal is to guide students in expressing complex ideas. Various perspectives emerge from a structured template to adapting and understanding the importance of writing a well-organised essay. The theme consists of two sub-topics, focussing on the overall structure and the counterargument and refutation components.

The overall components

For political science, Veena underscores the significance of the structure as “guidance” and “protocol” in writing, envisioning students progressing from basics to handling complex debates:

*Well, if you can't do the **basics**, um, you can't expect for something **more complex**. Um, we think that the issue of reading, if there's an enough stock of information, and having enough words, you can make it interesting. ... But the structure is **guidance**, right? Um, it starts with this protocol, this guidance like this. It's, um, like, one day, if they can write **something complex**, it's even better. Um, um, like a debate, right?*
[Veena_PolSci]

Pitak also shares a flexible approach he uses in his class which allows students to start “freely.” Moreover, Pitak's incorporation of assignments related to visual politics appears to be loosely consistent with the 6-component structure that ends with a conclusion.

For EAP, Chaiwat emphasises the structure's logical flow, beginning with a clear introduction to articulate the writer's stance and progressing through addressing opposing viewpoints with counterarguments and refutations. His approach underscores the structure's role in facilitating coherent and persuasive argumentation, enhancing students' ability to engage critically with

multiple perspectives. In contrast, Oranee highlights the structure's adaptability as a flexible tool rather than a rigid template. She acknowledges its rarity in real-world essays but emphasises its value as a guide for students to organise their thoughts effectively across different writing tasks:

*In reality, it's very **rare** to encounter an essay that is structured like this, right? It's like, um, I would like students to know that this is what they call, um, **a template**. ... I want them to see **the importance of writing a structure like this**. Ultimately, um, take it and write wherever it can be used for real. Is it correct? Like, for exams such as IELTS, TOEFL, right? It's like a fundamental structure, right?*

[Oranee_EAP]

Focusing on the final component, Anuchit focuses on the importance of providing “concrete” guidance to students when it comes to writing conclusions. He expresses the need to move beyond simply labelling it as a “summary” and instead aims to make the guidance more tangible for students. Anuchit's approach involves offering specific instructions on what students can include in their conclusions to enhance their understanding. He acknowledges that these guidance practices might vary among teachers, and he notes that, currently, such detailed instructions are not explicitly included in the formal lessons.

In exploring the structure of argumentative writing across EAP and political science contexts, several key findings emerge. Participants from both disciplines emphasise the importance of a structured approach to essay writing, highlighting components such as introduction, position statement, counterarguments, refutations, and conclusions. This structured framework serves as a guiding tool, facilitating the expression of complex ideas and enhancing clarity in academic writing. While instructors acknowledge the flexibility of adapting this template to various writing tasks, they also recognise its role in fostering skills necessary for rigorous academic discourse. This approach, although primarily aimed at enhancing writing proficiency and argumentation skills, indirectly supports critical thinking by encouraging students to engage deeply with different perspectives and to formulate well-supported arguments.

However, these findings also point to potential limitations in the conceptualisation of criticality. The structured nature of essay writing, while beneficial for skill development, may constrain opportunities for students to explore critical thinking more broadly. The focus on technical aspects like grammar and essay structure, while important, could overshadow explicit instruction in higher-order critical thinking skills such as independent analysis, synthesis of diverse viewpoints, and creative problem-solving.

Counterargument and Refutation

The focus now turns to the vital components of counterargument and refutation in the realm of argumentative writing, as discussed by EAP instructors. These excerpts shed light on the

perceived importance of presenting opposing viewpoints, engaging with them critically, and strengthening one's position through effective refutation.

Anuchit emphasises that by incorporating a counterargument and subsequently providing a robust refutation, the overall argument becomes “more convincing.” This approach, he believes, strengthens the writer's position and persuades readers by demonstrating a comprehensive understanding of the subject matter:

*I think that having a **counterargument** serves the purpose of **making people who don't read our work see that we think from different perspectives**. Can you imagine? To show that we don't have only our biased beliefs on one side, but we also **consider the other side's thoughts**. Then we bring it back with a counter, and our refutation is stronger than their counter. It's more **convincing**. Therefore, we believe this side. Do you get it? It makes it **more convincing**.*

[Anuchit_EAP]

Oranee also underlines that engaging with opposing views demonstrates writer's “awareness,” provides readers with valuable information, and creates an impression of openness to dialogue:

*... When you read it, and the writing addresses **the opposing side**. Right? We would feel like, um, they provide **good information** right? It's like **showing awareness** of what the opposing view would counter. It's like **leaving room for doubters** or something. Um, and also, um, what they call, um, showing **engageability**. What do they call it? Sometimes, I feel like it shows that we are **open for dialogue**. ...*

[Oranee_EAP]

Furthermore, Oranee uses the example of the abortion debate to illustrate her point. She notes that the pro-life stance lacks a thorough understanding and hence ineffective refutation of pro-choice arguments. She argues that by presenting a strong counterargument and effectively refuting opposing views, writers can “engage readers” who may initially disagree.

Interestingly, Chaiwat underscores the significance of critical thinking in the context of counterarguments. He suggests that generating counterarguments requires “critical thinking” and “discretion.” By stating, “Hey, it's still not good enough,” this likely implies that crafting effective counterarguments involves a thoughtful assessment of the weaknesses in opposing perspectives:

*For **counterarguments**, it requires **critical thinking, discretion** like, “Hey, it's still not good enough. Um-hmm. It's not good enough from **others' works, others' opinions**. Um, I have to come and write something like this.” At this point, I think it should involve critical thinking skills to some extent.*

[Chaiwat_EAP]

The exploration of counterarguments and refutations in argumentative writing by EAP instructors reveals a shared belief in the persuasive power of presenting diverse perspectives. Importantly, the sub-theme “Counterargument and Refutation” resonates with the broader

themes of multiple perspectives and, importantly, the importance of cultivating critical thinking abilities as illustrated in the previous themes.

Discussions among EAP instructors underscore the importance of counterargument and refutation in persuasive writing. Anuchit highlights that integrating these elements strengthens a writer's position by showing a comprehensive understanding of differing viewpoints, thereby enhancing persuasiveness and promoting criticality. Oranee views counterarguments as a means to demonstrate awareness and engage readers, fostering openness to diverse perspectives. Chaiwat adds that crafting effective counterarguments requires critical thinking and discretion, making these skills essential for compelling academic arguments.

While the instructors emphasise the importance of counterargument and refutation in enhancing argumentative skills and critical thinking, the extent to which explicit instruction and assessment effectively cultivate these abilities may vary. The pragmatic approach of treating counterargument and refutation as persuasive tools in writing could potentially overlook deeper, epistemological aspects of criticality, such as questioning underlying assumptions or critically evaluating sources. Moreover, the emphasis on persuasive effectiveness could inadvertently prioritise rhetoric over genuine engagement with conflicting viewpoints, potentially limiting students' development of critical thinking skills beyond the immediate demands of academic writing tasks.

5.4 Challenges and Concerns

This examination unfolds in four distinct sub-themes. The first sub-theme explores the interplay between reading habits, critical thinking, and effective opinion expression, while the second sub-theme discusses challenges in formulating clear positions, addressing counterarguments, and providing robust support. The third sub-theme explores concerns regarding reading habits, echo chamber effects, and academic honesty in online environments, while the fourth sub-theme focuses on apprehensions about students' linguistic abilities in their political science studies.

5.4.1 Critical Thinking and Argument Building

The political science and EAP instructors highlighted different issues faced by students. For political science, Veena expresses the importance of reading and its connection to critical thinking. When students speak without having read and engaged with the relevant material, their opinions lack depth. In other words, their perspectives become more like personal opinions without a solid foundation:

*This aspect is **challenging** because it assesses the depth, meaning how well one can **justify their opinions**. It's not about judging critical thinking; it's more about seeing if the student is attempting to **engage** with the text, **analyse** it, and **justify** their opinions. If someone performs exceptionally well, it's similar to **elaborating, showcasing a deep and detailed analysis** that is **convincing**.*

[Veena_PolSci]

Pitak is discussing the contemporary involvement of political issues in students' lives and their growing disillusionment with democracy. He expresses concerns about the impact of the new generation's culture on their ability to construct effective arguments:

*Especially in recent years, political issues have become increasingly **close to our lives**. Students tend to be somewhat **disillusioned** with democracy because they believe political parties are corrupt.*

[Pitak_PolSci]

Pitak provides a historical overview, noting the existence of political parties in Thailand for around ninety-one years, multiple instances of coups since 2006, and the presence of four constitutions between 2006 and 2017. Similar to Veena, Pitak also expresses concerns about the impact of the new generation's culture on their ability to construct effective arguments. He suggests that a lack of information could limit their capacity to build strong arguments.

The concern over critical inquiry also resonates with Unchalee. In her observation, Thai students struggle with asking questions and often avoid asking questions or pose simple ones. Only a few students consistently engage in asking more complex questions. This complements the broader political science perspectives provided by Veena and Pitak:

*... I feel that, in terms of **critical thinking**, Thai students are not good at **asking questions**. Um. Asking questions, like... simple questions. They will have to think deeply that a question should be somewhat complex. Um. Actually, just like, "What does that mean?" Can you help expand the meaning? This can become a question, right? But **students don't ask**.*

[Unchalee_PolSci]

For EAP, Oranee expresses concerns about the emotional aspect of critical thinking and highlights the need for emotional detachment in the process:

*Because sometimes, **being critical**, it comes with **being angry and emotional**, right? True, right? Um, which, in my opinion, if you can separate it, um, like, **being detached emotionally**, what do they call it? **Knee-jerk**, something like that.*

[Oranee_EAP]

Oranee advocates for the separation of emotion in critical thinking and emphasises the importance of approaching questions and critical analysis with emotional detachment, using terms like "knee-jerk" to describe impulsive emotional reactions. This concern is reiterated in terms of students' "maturity." She characterises them, to some extent, as "whiners" rather than fully mature critical thinkers.

Comparing political science and EAP instructors' perspectives on critical thinking and argument building reveals distinct emphases and challenges. Political science educators like Veena and Pitak prioritise scholarly engagement and contextual understanding, linking deep critical thinking to historical and political literacy. They stress the importance of students justifying opinions through rigorous analysis of complex texts and societal issues. In contrast, EAP instructor Oranee focuses on emotional detachment in critical analysis, cautioning against knee-jerk emotional responses and advocating for a balanced approach that integrates intellectual rigour with emotional maturity. This suggests that criticality encompasses both intellectual rigour and emotional maturity, reflecting a broader understanding that integrates analytical skills with emotional intelligence in academic discourse and argumentation.

While political science instructors focus on scholarly rigour and socio-political contexts, EAP instructors grapple with emotional engagement and cultural factors that may inhibit students' ability to engage critically. Bridging these perspectives, however, requires careful consideration of disciplinary differences and the contextual realities shaping students' educational experiences. These insights highlight the challenges in nurturing critical thinking and effective argument building among students. The concerns span from the impact of the digital age on information consumption to the emotional nuances of critical analysis and the need for students to ask thoughtful questions.

5.4.2 Understanding and Applying Argumentative Writing Components

This theme is voiced by all the EAP teachers with a specific concern over articulating counterarguments and refutations. First of all, Chaiwat is expressing concerns about the recurring issue of the understanding and application of counterarguments and refutations. He notes that this creates a persistent challenge in their ability to provide strong, diverse, and well-supported arguments, particularly in the pro-argument phase. Similarly, from Anuchit's observation, students struggle to grasp the essence of a counterargument and often misuse it in their compositions:

*I think the part where students struggle is with the **counterargument**, according to my observation. Many are still **confused** about what it really is. Sometimes, **the points they use for refutation don't align with the counterargument**. It's like this: if we look at the structure here, at the position statement, it represents our idea, what we believe. When it comes to the counter, it presents the opponent's idea. Then, when they use it for **refutation**, it brings it back to our side. ...*

[Anuchit_EAP]

Anuchit points out that the position statement represents the writer's belief; the counterargument presents the opponent's idea, and refutation brings the argument back to the

writer's side. He believes that students often become confused during this process, especially when identifying conflicting issues or implementing the counterargument incorrectly.

For Oranee, the challenges students encounter with counterarguments and refutations may not solely be a language problem but also “a thinking problem.” She implies that students may struggle with the conceptual aspect of formulating counterarguments and refutations rather than just language proficiency:

*I think the most challenging thing for students is the **counterargument** and **refutation**. ... So, when they write, sometimes they, I sometimes feel that it's not a language problem; it's **a thinking problem**. Um, like, the use of refutation. Sometimes they might just do something like listing pros and cons, right? And they might feel that writing a counterargument and refutation is simply taking the pro side and taking one point from the con side, which **they don't understand that they have to go together**.*
[Oranee_EAP]

Oranee notes that some students may approach it as listing pros and cons, without fully engaging in the process of refuting the counterargument effectively. In addition, when discussing democracy for Thailand, she reveals that students tend to focus predominantly on the advantages of democracy without directly addressing its suitability in the Thai context. Some students deviate from supporting their own points to irrelevant complaints about totalitarian or authoritarian regimes, which underlines the importance of staying focused and relevant.

Findings from EAP instructors highlight the importance of conceptual clarity and logical coherence in argumentation. Chaiwat and Anuchit note that students often struggle to differentiate between their own position statements, counterarguments, and the refutation process, indicating a need for clearer guidance in integrating diverse perspectives. Oranee adds that these challenges go beyond language proficiency, reflecting a deeper conceptual difficulty in strategically using counterarguments and refutations. This suggests that students not only face technical challenges but also struggle with the critical skill of effectively integrating opposing viewpoints, a foundational aspect of criticality in academic writing.

5.4.3 Student's Performance in Online Environment

Amidst the Covid-19 pandemic affecting the mode of teaching and learning at the university and during the research fieldwork, this sub-theme emerges to address such concerns. The three political science instructors, Veena, Unchalee, and Pitak, highlight concerns related to students' engagement and performance in the online learning setting.

Firstly, Veena expresses a concern that the online environment might pose challenges and “distractions” in motivating students to tackle readings effectively. Likewise, Pitak questions

students' reading habits in the online context, raising concerns about whether students read enough and allocate sufficient time for thoughtful engagement:

*In the online world, an **easy-speaking area**. It's not in, um, offline. Like, it's not offline. Right? We question them a bit about whether they **read enough**, and whether reading takes a lot of time or not. Do they take **enough time to think**?*
[Pitak_PolSci]

Veena's concern appears to stem from various distractions that affect reading, while Pitak characterises the online world as an "easy-speaking area." This suggests that students might find it convenient to express their opinions without much challenge. Moreover, Unchalee points out that some students tend to gravitate towards ideas that align with their existing views:

*But some students tend to dwell on that this idea is the most accurate in this environment. It's like **an echo chamber**, right? Like on **social media** or something like that. Because of **technology**, it might make them **inaccessible to certain sources** that are from other sides.*
[Unchalee_PolSci]

Interestingly, she likens this behaviour to an "echo chamber," emphasising that, especially on social media, students might limit themselves to sources that only reinforce their perspectives. Furthermore, the influence of technology might restrict students' accessibility to diverse sources as well as hinder their exposure to different viewpoints. Since the COVID term, Anuchit noticed a rise in his expectations for academic integrity, became more vigilant, addressed the issue of plagiarism directly with students, and emphasised the seriousness of dishonesty.

This subtheme reveals the challenges—such as distractions, echo chamber effects, and concerns over academic integrity—which suggest significant implications for criticality development. Specifically, these findings indicate that students navigating online environments should actively engage in critical thinking to overcome biases, evaluate information rigorously, and seek out diverse perspectives. The notion of an echo chamber underscores the importance of students' ability to critically assess sources and expand their perspectives beyond self-reinforcing viewpoints. Moreover, heightened expectations for academic integrity hint at the need for students to cultivate ethical reasoning and discernment in their academic journey.

5.4.4 Language Skills and Proficiency

In this sub-theme, the interview participants express apprehensions about students' linguistic capabilities, particularly in relation to their academic pursuits. This theme encompasses challenges faced by both undergraduate and master's students.

Firstly, international relations (IR) lecturer Veena cautions against the reliance on Thai-language summaries only and underlines that such translated sources may not be original theorists:

*Sometimes, there is no shortcut in learning something this way. They may prefer **relying more on Thai-language summaries**, thinking that they're citing the theory from those sources. However, that's not the case because these individuals might not be original theorists. ...*

[Veena_PolSci]

Unchalee suggests that public administration students may not have reached a similar level of English proficiency, partly due to a lack of opportunities and insufficient provision of English texts. Unchalee reflects on the difference in teaching approaches and mentions her training in the International Relations Department where English was the primary medium of instruction, contrasting it with the challenges she faces in her current teaching environment. However, there is a paradoxical element in Unchalee's statement:

*Um. I have to like, um, find out who wrote what at whose level. Um. Who wrote as a Thai language author so that the students can read it? Because if you use English language reading materials, the students either don't understand or barely read it. It's like **provincial**. Can you imagine? As I continue teaching like this, I am becoming more **provincial** as well, something like that.*

[Unchalee_PolSci]

To facilitate more accessibility to the content and the students' language abilities, she seeks out Thai authors, but she acknowledges that this practice may inadvertently contribute to a more "provincial" knowledge base which suggests a potential paradox between the goals of global exposure and the practicalities of student comprehension and engagement.

All in all, the instructors' concerns revolve around the delicate balance between exposing students to a diverse, global perspective through English-language materials and addressing the practical challenges posed by varying levels of language proficiency. Instructors emphasise the importance of original sources and global perspectives, cautioning against over-reliance on translated summaries that may dilute theoretical rigour. The tension between promoting English proficiency and accommodating students' linguistic limitations highlights a potential paradox: while striving for a broad, global understanding, educators must navigate practical barriers that may lead to a more localised knowledge base. This balance between linguistic development and academic comprehension underscores the complexity of fostering criticality, suggesting that true critical engagement requires both linguistic competence and access to diverse, original sources.

Even so, the emphasis on English-language materials may overlook the value of multilingual approaches and the potential richness of non-English theoretical contributions. By prioritising English texts, instructors might unintentionally limit students' exposure to diverse intellectual traditions and critical perspectives available in other languages. This focus can lead to a narrower view of political science, potentially neglecting valuable insights and theories from non-English speaking scholars. This concern reiterates the earlier theme of the importance of

English proficiency while highlighting the complexities and potential limitations it brings to the inclusivity and scope of political science education.

5.5 Summary and Conclusions

This chapter reveals a dynamic interplay of themes, ranging from conceptualising critical thinking and criticality to understanding argumentation, learning inquiry, and addressing challenges and concerns. This multifaceted, academic journey underscores the unique nature of guiding students toward becoming informed, analytical, and adaptable individuals. In essence, what could this all mean for the nature of criticality?

Firstly, "*Conceptualising Critical Thinking and Criticality*" presents a nuanced view of criticality, shaped by varied educational priorities. In political science, critical thinking involves informed questioning, drawing on extensive background knowledge and historical context to engage with multiple perspectives, fostering a broad, comprehensive understanding. In contrast, EAP focuses on identifying logical gaps and questioning assumptions, prioritising immediate analytical skills. These differing approaches highlight the dynamic nature of criticality, where political science promotes an expansive, context-rich engagement, while EAP hones precise, analytical scrutiny. The contrast suggests that critical thinking is multifaceted, requiring a balance between broad contextual understanding and focused analytical skills to foster robust critical engagement in students.

Moreover, the exploration of "*Nature of Learning Inquiry in Political Science*" unveils the foundational aspects that shape criticality within the discipline. It underscores political science's commitment to rigorous inquiry, scepticism, and a multifaceted approach to understanding complex issues. Through diverse perspectives and disciplinary lenses, the theme illuminates how critical thinking in political science goes beyond surface-level analysis to encompass deep, analytical engagement with political ideologies and global affairs. This emphasises the importance of questioning assumptions, critically evaluating information, and fostering independent thinking among students. The theme also highlights the role of English proficiency as integral to accessing global knowledge and participating in international debates, underscoring its impact on shaping critical perspectives within political science education. However, challenges related to language dominance and access to diverse perspectives suggest ongoing considerations for enhancing inclusivity and broadening the scope of critical inquiry in political science education.

Besides, in exploring the "*Roles of Argumentation and Argumentative Discourse*," key insights reveal varying approaches to criticality. Both disciplines stress structured essay writing—

introductions, position statements, counterarguments, refutations, and conclusions—crucial for clarity and coherence. However, this focus on technical structure may limit deeper critical engagement. While instructors value these frameworks for guiding students through complex ideas, there's a challenge in balancing persuasive techniques with fostering higher-order thinking, such as independent analysis and synthesis. Although basic argumentative frameworks build foundational skills, they might restrict deeper engagement with diverse perspectives. Criticality is enhanced when students are encouraged to challenge assumptions, integrate conflicting viewpoints, and consider broader implications in their arguments.

In “*Challenges and Concerns*,” the shift to online learning during COVID-19 introduced challenges like increased distractions and the formation of echo chambers, where students may gravitate towards information that aligns with their existing views. This suggests the need to cultivate strong critical thinking skills for navigating digital spaces, evaluating sources, and engaging with diverse perspectives. Additionally, concerns about students' English proficiency present a dual challenge: while essential for accessing global academic discourse, an over-reliance on English texts can marginalise non-English-speaking scholars and limit the diversity of perspectives. This tension affects the development of criticality, with some students struggling to access global discourse due to language barriers, while others may integrate diverse viewpoints more effectively. These challenges in online learning and language proficiency complicate the development of criticality, influencing students' ability to engage with global academic discourse.

Following the conceptual dimension of criticality, the study now shifts its focus to scrutinising criticality in action. By examining empirical evidence of classroom teaching, particularly in the context of argumentation within the EAP course, the study aims to add depth to our understanding and examine how criticality potentially manifests in a real educational setting.

Chapter 6 Observation Findings

In addition to conceptualising criticality and argumentation, the present study delves into the nature of criticality development through argumentation practice in the classroom. By asking **“How do instructional approaches and strategies in argumentation reflect the underlying nature of criticality development?”**, the investigation of classroom practice aims to gauge the extent to which criticality, within this EAP curriculum, can be developed through crafting well-supported arguments, showcasing an appreciation for diverse perspectives through a range of argument building techniques and strategies, and critical discussions between the EAP teacher and the political science students.

The observed class, conducted by Oranee, unfolds over the last five weeks of the EAP course (3 hours per week) with a focal point on the final unit of the curriculum "Controversial Issues." This unit centres on mastering argumentative writing, a skill pivotal for success in the final examination. The entire observation occurred amid the challenges posed by the COVID-19 pandemic; therefore, this necessitated the online delivery of the course through institutionally licensed Zoom application.

In this chapter, specific symbols are employed to denote individuals actively participating in the discourse. Specifically, the symbol 'T' designates the teacher, while 'S' is for students, each assigned a unique identifier such as **S1**, **S2**, and **S3** to distinguish multiple student contributors within a given discussion. It is crucial to note that S1, S2, etc., do not reference the same students consistently across the excerpt; rather, they signify the count of different students engaging in the focused discussion. This is due to the challenges of online delivery, further underscored by the difficulty in tracking individual students as many opted to keep their cameras turned off throughout the session.

In this chapter, there are three main themes for the observational findings:

6.1 Crafting Effective Arguments: The Interplay between Argumentative Structure and Evaluation

6.2 Critical Discussions, Perspectives, and Debates: Navigating Controversial Issues

6.3 Mastering Rhetorical Power: Argumentative Techniques and Strategies:

6.3.1 Building Powerful Position through Introduction and Conclusion

6.3.2 Constructing Critical Stance through Counterarguments and Refutations

6.3.3 Reinforcing Pro Arguments through Evidence and Support

6.3.4 Critical Information Assessment and Source Reliability

6.1 Crafting Effective Arguments: The Interplay between Argumentative Structure and Evaluation

The emphasis of "Crafting Effective Arguments: The Interplay between Argumentative Structure and Evaluation" lies prominently on refining the technical aspects of effective argumentative writing within the EAP classroom. The teacher's navigation through argumentative structures not only equips students with the skills needed for constructing persuasive narratives but also integrates with the evaluation process. This theme lays the groundwork for developing argumentative skills, which are essential for understanding the nature of criticality in later discussions.

To better illustrate the teacher's strategic guidance, I will examine a specific classroom discussion on planning an argumentative essay. During the first week of learning about argumentative essays and controversial issues, the teacher focused on the role of supporting sentences in expanding a single point into a detailed paragraph. This pedagogical moment highlights the teacher's emphasis on developing well-structured paragraphs in argumentative writing. The teacher consistently stressed the importance of the planning stage, which includes choosing and researching topics, evaluating the significance of information, selecting reliable sources, and addressing counterarguments and refutations (Excerpt 12.3):

Excerpt 12.3

*T: Yeah. So, you know, easy first of all, decide on the topic and then the next stage is gonna be time consuming. This is a stage that you probably are going to be doing for the our discussion or you know the (xxx) A very **important kind of indicator** of whether your paper is a good paper or a bad paper. Yeah. And so, you know, **it's worth spending a little bit more time on, you know, counterarguments. Yeah. And refutations.** That's my suggestion.*

The teacher emphasises allocating time to consider counterarguments and refutation, key indicators of essay quality (explored in theme three). Using the analogy of layers in a hamburger, they illustrate that the introduction and conclusion can be addressed later, simplifying the planning process and making it memorable for students. This approach prioritises strategic thinking and a methodical approach to essay writing, focusing on counterarguments, information significance, source reliability, and using a memorable analogy.

The teacher also provides guidance and context to the students regarding the outline they will be using for the final exam. Consistent with the interview findings, excerpt 14.2 captures an attempt to clarify on the overall 6-component structure used in the EAP class. While the teacher acknowledges that the outlined structure may initially seem restrictive, she emphasises its value as a solid foundation for learning:

Excerpt 14.2

T: *This is the outline that you will be using, yeah, for the final exam, yeah. I, I know that it seems a little bit **restrictive**, but trust me that this is **a very good start**. Yeah. For you at this point in the future. Yeah. Once you have mastered this outline here, you will be able to do a little bit more freestyle. Yeah. When it comes to kind of like writing an actual essay, if you are to become, you know, a news reporter or like, you know, you know work that involve like writing an argumentative essay. Now you can be a little bit more **creative** with your style, with your, you know, structure. But at this point as we're just practicing, as we're learning how the this is the **basic**, this is the **fundamental**. Like, you know, **101**. Yeah, of like argumentative writing. And so this is where we're going to be starting from.*

Within this theme, the teacher acknowledges outline limitations, validating student concerns while stressing its foundational role ("*fundamental 101*"). This assures students that mastering this structure fosters creativity and flexibility in writing styles. The approach establishes a structured base for advanced argumentation. Additionally, the teacher integrates evaluation processes, guiding persuasive narrative construction and emphasising assessment criteria understanding. Discussions on paragraph structuring and hamburger analogies simplify argument crafting, reinforcing critical argumentation and evaluation connections.

These pedagogical strategies not only navigate the complexities of writing but also underscore the importance of planning stages and systematic application of scoring components like reference, cohesion, and coherence across argumentative essays. By emphasising these elements, the teacher equips students with skills to construct well-supported arguments while fostering a deeper understanding of how evaluation criteria shape academic discourse. However, even though these technical skills are crucial for developing effective arguments, their direct contribution to fostering criticality among students may have limitations.

The structured approach, while providing a clear framework, reflects characteristics of early criticality as described by Johnston et al. (2011). At this stage, students often focus on mastering foundational skills, such as adhering to prescribed outlines and evaluation criteria, which are essential for constructing coherent arguments. However, this emphasis on conformity to established structures may limit their ability to experiment with more diverse or unconventional argumentative strategies, thereby constraining the development of higher-order criticality involving evaluative and reflective thinking.

While this theme establishes a strong technical foundation, the examination of subsequent themes is set to unfold the potential for deeper explorations into the kind of nature of criticality development within the EAP setting. The groundwork laid in this theme sets the stage for a more comprehensive understanding of how students can not only construct effective arguments but also foster a nuanced and critical approach to their academic discourse.

6.2 Critical Discussions, Perspectives, and Debates: Navigating Controversial Issues

This theme delves into controversial topics in the EAP classroom that cover issues from abortion, domestic violence, and marijuana legalisation, to conservatism in Thailand and the impact of political propaganda on a social media platform. Students are not only exposed to controversial topics but are actively engaged in deciphering and co-constructing meanings and a deeper understanding of societal debates. This thematic representation sets the stage for an exploration into the interplay of cultural dynamics and sociopolitical controversies that shape the nature of criticality development for the discipline.

In the EAP class, "controversial" is defined by students as involving disagreement, particularly in public discussions. The teacher emphasises both disagreement and public engagement, encouraging students to openly express viewpoints and articulate reasons for disagreement. This fosters a culture where diverse perspectives are welcomed and explored through brainstorming activities that stimulate active engagement. Students recognise controversy arises from multiple perspectives, with the teacher elaborating on the reasons behind differing viewpoints, further exploring the complexity of controversial issues in society.

This theme substantially expands on discussions, argument exchanges, and co-construction of meanings on various topics. This not only reflects the teacher's strategic pedagogical approach to actively engage students and delve deeper into the topic in question, but it also sheds light on the pertinent issue of sex education in Thailand (excerpt 10.6 and 10.8), the discussion of which connects to the final examination prompt (teaching same-sex marriage in primary education):

Excerpt 10.6

S1: *Ehh*

T: */yeah/*

S1: */It should/ be **legal***

T: *It should be legal? yes what are some of the arguments? (3) reasons*

S1: *Ehh because of the **human rights***

T: *Ah-huh yes? Human rights (4) yes it actually when it comes to eh **equality** yeah equality right ok equality (the teacher is typing equality on the shared screen) xxx ok human rights and equality ok yeah people should have it should be legal right so what are so what do people who disagree with this like what are they thinking? @@@ {S1} thank you for your help you wanna add to that as well? (3) so people who are against same-sex marriage what's the what's the what's their reason? (2)*

S1: *Emm I'm not sure but err the @ the **conservative people**=*

T: *=umm*

S1: *@*

T: *Ah-huh (3) yes? (3)*

S1: *I'm not sure what the reason @@*

T: Ahh @@ you just know that these people yeah @@ oh these people they're **old** @@@ right not sure about their reason ok? Ah I think it's good to maybe like ahh you know maybe acknowledge their reasons we call this **COUNTERARGUMENT** yeah so you know this is kinda like what we're trying to brainstorm right now so counterargument what are some of the reasons? Anybody? Thank you so much {S2} yeah so the conservative so they are are conservative because you might have heard this from before so you now you will hear this term a lot CONSERVATIVE because these people what conservative **what makes them conservative** anybody? You wanna guess? {S2} you wanna guess? (3) Are you here? You know for those of you who are not answering I'm just gonna assume you're not here umm yeah {S3} are you here? (2)

In excerpt 10.6, students begin by advocating for same-sex marriage on human rights grounds, demonstrating a grasp of equality and legal rights. The teacher encourages considering counterarguments, specifically from "conservative" perspectives. However, the students' engagement with these viewpoints remains superficial, as they struggle to articulate specific reasons beyond labelling them as conservative, corresponding to the beginning stages of criticality conceptualised by Johnston et al. (2011). This reveals a missed opportunity for deeper exploration into the moral, religious, or societal concerns that shape such stances. A more critical approach to unpacking these perspectives could enhance students' analytical skills and deepen their engagement with opposing viewpoints.

The discussion about the concept of "conservative" expands in the following discussion (Excerpt 10.8) in which the teacher initiates a discussion on the topic of sex education, seeking the opinions of three students:

Excerpt 10.8

T: Yes, sex education. What do you think? What's your thoughts on it?

S1: I think it's about the. Like **conservative people who think that we shouldn't study about sex**. Umm like oh you know, kids, they we shouldn't talk to them @about sex@ or something like that.

T: Yeah. They might think we are too young to study about these.

S1: Umm yeah.

T: So they think that like oh too young. But how young is too young, by the way? Or maybe like eh sex education on in the media or like, you know, something like that, yeah. (2) Or anything else? (2) {S2} What do you think?

S2: Umm. Like sex education er **should be mandatory** in schools.

T: Oh good, that should be mandatory. Right now is not? **What's the current affairs?** (5) I mean, it's OK to say, like, I'm not sure. Yeah, but yeah. **So what are some of the arguments around it?** So conservative people, @you agree@ with your friends, conservative people said, you know, kids in high school are too young, right? (5) Anybody er {S3} do you want to say something more on this? Umm **What's the other side of the argument?** So /conservative/

S3: /Sex education/ **doesn't doesn't increase sex**.

T: Ah, I like that. So sex education does not lead to sex? Good. I like that

S2: **It doesn't encourage sex**.

T: Exactly. So you. I think that's the topic, right? Like, sex education does not encourage, yeah, encourage sex. @ And maybe this one could be another subtopic. OK, good. And so conservative people said like, oh, it's **too young**, it's **indecent** or something like that. But on the other side, what's are some of the arguments that, you know, say that people

*should or like we or we should give proper sex education for the kids? (3) They're **health reasons**, yeah, of course. Right. Health reasons or like. Yeah, family planning. What else? Anybody. Et cetera. @ I'm going to just leave it. Etcetera. I think this is a very good topic. Sex education also, you know, just the the fact that we don't really talk about sex or like, **the topic of sex makes people feel uncomfortable**, right? You know, a lot of people are so kind of like we try to move towards the opposite direction, right? Like, you know, we we try to be **more open about sex**. We are like the topic of sex. Yeah, it shouldn't be. It should be something that eh can be more accepted.*

In a discussion on sex education, the teacher facilitates diverse viewpoints. Starting with S1's conservative stance against early sex education sets the stage for contrasting opinions, with S2 advocating for its inclusion in schools. Probing questions like "*How young is too young?*" and "*What are the current affairs?*" prompt deeper reflection on societal norms and policies. The teacher affirms contributions, such as S3's point on the impact of sex education on sexual activity, validating student perspectives. Exploring health reasons and family planning broadens the discussion, showing how broader societal issues intersect with specific topics like sex education, enriching students' understanding and prompting consideration of wider implications.

Similar to Excerpt 10.6, while the teacher encourages dialogue and offers supportive feedback, there may be a need for more explicit guidance on navigating potentially sensitive or controversial topics such as sex education. Addressing how to handle differing cultural or personal beliefs more explicitly and perhaps extensively could enhance the depth of critical engagement and ensure that all perspectives are respectfully considered, conservatism in this case.

By scrutinising conservative viewpoints more deeply, students could develop a more inclusive dialogue, constructing comprehensive arguments and addressing differing perspectives with greater empathy and informed reasoning. This would potentially align with the concept of guided criticality (Johnston et al., 2011), where teacher scaffolding plays a crucial role in helping students navigate complex and sensitive topics. The teacher's introduction of subtopics and encouragement of exploration exemplifies this guidance. However, a more critical approach could involve explicitly directing students to examine evidence or research supporting or refuting claims about the effects of sex education. This structured guidance would help students move beyond surface-level assertions, fostering their ability to engage with evidence-based arguments and develop deeper analytical skills.

Subsequently, in excerpt 14.5, the class engages in a discussion about fake identities online, where students and the teacher collaborate to understand the nature of social media accounts. The discussion is mostly in Thai with English translation underlined in square brackets:

Excerpt 14.5

S8: คือมันเหมือนแอคเค้าท์ที่แบบว่า เขียนชื่อแอคเค้าท์ตามที่คนติดตามเยอะๆอะค่ะ แล้วคราวนี้คนก็จะคิดว่าเป็นแอคเค้าท์อันนั้น แล้วเวลาที่แอคเค้าท์ใหญ่โพส แอคคเค้าท์นี้เค้าก็จะมาแบบตอบเมนชั่นของคนอื่นโดยการให้แบบคลิกลิงค์เข้าไป อะไอย่างเงี้ยค่ะ ซึ่งถ้าคลิกลิงค์ไปมันก็จะเสียเงินหรือพวกกลุ่มไวรัสอะไรพวกเนี้ยค่ะ *[They are those accounts that use similar names to the popular ones. Then people mistake them for the real ones. And when the real one posts, they would reply to people by sending them a link to click or something. If people click it, they may lose money or get viruses.]*

T: อืมม {S9} เหมือนกันมัย *[Umm are they the same?]*

S9: อืมม ก็อาจจะ จุดประสงค์อาจจะคล้ายๆกันครับ ด้วยความมาหลอกเงิน แต่อันนี้อาจจะเป็น มีรูปหรือเอาไว้แบลกลเมลล์หรืออะไรอื่นๆ *[Umm they could be. The purposes are similar in terms of fraud, but this one uses pictures for blackmailing and whatnots.]*

T: อืมม มันต่างกันอยู่ เท่าที่ฟังดูอะเนอะ แต่มันฟังดู ไม่ได้ต่างกันมากขนาดนั้น ใช่มั้ย ใช่มั้ย *[Umm they are quite different, but not that much, isn't it?]*

S9: ครับ *[Yes]*

T: ถ้ายังงั้นเรารวมเป็นอันเดียวกัน คิมัย คิมัย *[Shall we put them together as one? How about that?]*

S9: ครับ *[Yes]*

T: ก็คือว่า *fake identities* อย่างนั้น ใช่มั้ยคะ *[So they are fake identities. Something like that]* Fake account. Basically those people, these, these two group people are there to kind of like, you know. scam other people, right? But there are **different kinds of scamming**. Basically ใช่มั้ย เนอะ *[Aren't they?]* So like, you know. The the the kind that {S9} was talking about. It's kind of deceiving people of like their their own identity but like the one that {S8} was talking about is like pretending to be a famous person. Yeah. And so that's a difference maybe, yeah. So maybe that can be like the **two kinds of supporting**, you know, evidence that maybe like you can talk about these two cases. How about that? Maybe?

In Excerpt 14.5, the collaborative exchange among students in their native language (Thai) exemplifies effective co-construction of meanings and knowledge. Through discussing various forms of online fraud—such as impersonating popular accounts and using deceptive tactics like blackmail—students engage in categorising and summarising complex ideas. This process not only allows them to articulate their understandings clearly but also fosters a shared conceptual framework, as evidenced by their collective agreement on the term "*fake identities*" to encompass these practices. The teacher's role in synthesising their contributions enhances coherence and ensures that diverse perspectives are integrated, promoting a collaborative learning environment where students feel validated and encouraged to participate actively.

Having said that, while the exchange demonstrates effective knowledge organisation, a deeper critical analysis could enrich the discussion. Encouraging students to delve into the motivations behind online fraud, the ethical implications for victims, and broader societal impacts would foster deeper critical thinking and align more with the principles of guided criticality. This approach would challenge students to move beyond descriptive categorisation to evaluate the complexities and consequences of fraudulent activities. Furthermore, the teacher could facilitate this by posing probing questions that prompt students to consider alternative viewpoints and implications, thereby enhancing their ability to critically assess and engage with real-world issues beyond surface-level understanding.

Overall, this theme uncovers diverse pedagogical approaches in discussing contentious subjects in Thailand and beyond. Classroom interactions span topics like abortion, sex education, conservatism, political propaganda, and misinformation on platforms like Twitter, reflecting the interplay between local beliefs and global perspectives. While these discussions help students deepen their understanding by co-constructing meanings with peers and the teacher, their responses often lack depth and rely on teacher guidance. Moreover, although various perspectives are considered, there is a need for a more thorough exploration of the reasons and evidence behind differing viewpoints. The next theme on argumentative techniques builds on these discussions, focusing on how students articulate their perspectives through structured argumentative skills.

6.3 Mastering Rhetorical Power: Argumentative Techniques and Strategies

This theme captures the essential skills of crafting convincing arguments. In fact, this is a key part of the observations that marks the shift from exploring critical discussions to understanding how to create compelling and effective arguments. While certain aspects of this theme might echo what I have discussed in the previous theme, the primary focus is specific “strategies” that guide students to get better at making strong and persuasive arguments. This theme serves as a crucial bridge that connects with and underscores the six core argumentative components of the EAP course.

6.3.1 Building Powerful Position through Introduction and Conclusion

This subtheme centres on constructing a compelling introduction and conclusion. By exploring this theme first, it showcases the role of position statement (stance) in argument building. This also serves as a direction that guides the students to the subsequent components, each serving different rhetorical purposes and functions in their argumentative writing.

The first part emphasises the introductory section. The teacher and students engage in discussions about crafting impactful introductions. Prior to the excerpt 10.10, the teacher begins by highlighting a notable difference between Thai and English writing styles and notes that in Thai writing, individuals may present both sides of an argument and leave their stance “*vague until the end*,” or sometimes omit it entirely. In Thai writing, it is common to discuss both sides without clearly indicating a preference until the end or even omitting it altogether. However, in English, it is crucial to clearly state one's position from the outset:

Excerpt 10.10

T: So what would what can we say as we position as our position, if we think that smartphone is more useful?

S1: Ehh so we say that. eh Most of us think that smartphone is more useful than laptop.

T: Umm we don't have to say on behalf of other people. That's a thing. Yeah, I like that you say most of us, but for for argumentative essay like this, you can just say "**I believe that**" /What (xxx)/

S1: /I believe/ that smartphones are more useful than laptops.

T: Yeah something like that. Yeah. So you can kind of like make, make your kind of like you know, **put your foot down** "I believe" or you can even say, you know, to make it stronger, you can say "I firmly @@ believe that smartphones are more useful" or something like that. Yeah. So this can be your position statement. Yeah. Thank you {S1}. What about the opposite side? So if you happen to be the, you know, the laptop. Yeah, like, you know, Team laptop. What can you say as your position statement? {S2}

S2: (4) eh I firmly believe=

T: =Yes=

S2: =that em laptop is more use- useful than smartphone=

T: =Um you can say I firmly or you can also say "I strongly believe that laptops are more useful than smartphones" Something like that. Yeah. So thank you so much for your help. Yes. So just have to make it clear from the beginning. OK. That's what I mean. All right. So that's the position statement...

In Excerpt 10.10, the teacher guides students in formulating clear position statements, emphasising the use of assertive language like "I believe" or "I firmly believe" to express their stance effectively. It also highlights a cultural contrast in rhetorical traditions. Thai writing often favours a more balanced approach without explicit stance declarations, reflecting a cultural preference for indirectness and nuanced presentation of viewpoints. Teaching explicit position statements thus introduces students to conventions that may differ from their cultural norms. The analogy of the "buns" of an essay is reinforced where the teacher underscores the importance of a strong closing remark, encompassing elements such as proposing a "solution," making "predictions," or offering "recommendations" and "suggestions."

Furthermore, during a discussion on anonymity and privacy issues on Twitter (excerpt 14.14), the teacher prompts a conversation on the essential elements of closing remarks, suggesting that they should be forward-thinking or outward-looking:

Excerpt 14.14

T: OK. Summary มีแล้ว อะต่อไป Closing remarks, closing remarks. ต้องมีอะไรบ้าง มันต้องควรจะเป็น future looking ใหม้ย หรือว่า outward looking. ถ้าเราพูดถึง problem เราก็ควรที่จะพูดถึง solution ใหม้ย ถ้าเราพูดถึง current situation เราควรจะมี prediction for future ใช่ไหม หรือว่าเราก็ควรมี suggestion หรืออะไรแบบเนี้ย ทำงี้คิดะ closing remark เอาใจดี มีใครมีไอเดียมัย {S10} ลองไหนกะ จนยังงี้ดี (15) มีใครมีไอเดียมัย [Ok now we have the summary. Next is closing remarks. What should closing remarks have? It supposes to be future looking right or outward looking. **If we discuss a problem, then we should talk about a solution right? If we discuss a current situation, we should have prediction for future, right? Or we could have like a suggestion or something. What should we do with the closing remark? Any idea? {S10} would you like to try? How should we end?**]

S10: *I'm not good at closing remark,*

T: @

S10: @@ but but maybe we could talk about like **suggest Elon Musk** too. Not like deactivate enormous account.

T: Mm-hmm. Yeah, it would be **a nice callback**, isn't it? Yeah. That we kind of like, you know, **mentioned Elon Musk again**, right. And say, like, oh, because of all these reasons, right? Yeah. What is it again? Elon Musk should this is pretty much a suggestion. Yeah, should reconsider, right? Or like you should reconsider his proposal? แล้วไงต่อคือ [and what's next?]

S10: Twitter could be or

T: Yeah and use. อาจจะบอกว่า [we can say that] and maybe **come up with a new Twitter policy** which ah place the **most importance on yeah freedom of expression**? ...

In the provided excerpt, the teacher emphasises cohesiveness and forward-thinking in crafting closing remarks, prompting students to reflect on potential solutions and future predictions related to the discussed topic. This approach enhances the logical flow of argument building and encourages critical thinking about implications and subsequent steps, fostering deeper engagement with the material. The teacher's questioning technique directs students' thought processes toward meaningful, reflective, and proactive conclusions. By asking if solutions should accompany problems discussed or if predictions should follow the current situation analysis, the teacher prioritises a coherent narrative from problem identification to actionable steps or forecasts.

The effectiveness of this strategy is demonstrated in S10's response, who, despite initial difficulty, engages with the teacher's prompts and contributes a significant idea tying back to an earlier discussion (Elon Musk and Twitter). This callback enhances coherence and illustrates the internalisation of crafting forward-looking conclusions. The emphasis on assertive language and strategic rhetorical devices equips students with essential tools for persuasive arguments. Through explicit guidance on clear position statements and powerful conclusions, students are encouraged to structure their arguments effectively, enhancing their persuasive capabilities and fostering deeper engagement through coherence and logical progression of ideas.

Nevertheless, while teaching explicit expressions within this subtheme can enhance clarity and adherence to formal writing conventions, it also raises considerations regarding the potential impact on criticality. By prescribing specific language structures like "I believe" or "I firmly believe," there appears to be a risk of students prioritising conformity to linguistic norms over deeper critical engagement with the content itself. Moreover, in some cultural and rhetorical traditions, such as in Thai writing in this case, presenting arguments without overtly stating a position is valued for its nuance and respect for multiple viewpoints. Teaching explicit position statements may inadvertently impose Western rhetorical norms that prioritise directness and

assertiveness, potentially marginalising other rhetorical styles that value subtlety and complexity.

The following sub-theme "Constructing Critical Stance through Counterarguments and Refutations" aims to deepen critical thinking by exploring counterarguments and refutations in advanced argumentative writing.

6.3.2 Constructing Critical Stance through Counterarguments and Refutations

The theme illustrates challenging opposing viewpoints and fortifying one's position through effective counterarguments and refutations, found to be two prominent components of argumentative writing in the present study. As students take turns contributing, the dialogue reflects an evolving understanding of how to critically engage with differing perspectives while learning how to strengthen their position via effective refutations.

In this first excerpt (10.11), the teacher introduces the concept of counterarguments to the students and underlines that counterarguments involve presenting the opposing view or the perspective of those who disagree with the writer's stance. The teacher encourages students to recognise and engage with viewpoints different from their own. The rhetorical power of counterarguments lies in demonstrating awareness and open-mindedness:

Excerpt 10.11

T: =Yes. *What do you think we can achieve by mentioning counter arguments?*

S9: *Hmm like. **It can be argued that?***

T: *A-huh*

S9: (4) *Umm*

T: (5) *Oh, you you actually mentioned the **right expression** @@ the right expression. So we will talk about that in in a little bit. Yeah. Well, while we're doing that activities or the exercises, yeah, but basically the reason why we want to mention counter argument is because we want to **show our awareness**, right? Umm. {S10} what do you think? Anything else? That we can get from you know Include a counter argument? (6)*

S10: *Umm. You mean like other than like, umm **defensing, defensing**. Like what, what, what, what else more?*

T: *A-huh So counter argument, yeah. Is when we acknowledge that like, ohh. So this is the view of other people who who might disagree with us. Yeah? So we want to mention that. Why? Why do you want to mention that? What what? What good does it do for us?*

S10: (3) *Umm.*

/So we can have/

T: */ปกติเรา/= [normally we...]*

S10: =Ehh you can be like **open minded** and **listen to the different opinion** you know=

T: =Umm yes=

S10: =And **accepted** and, you know, kind of umm, @discussing@

The teacher prompts students to consider the benefits of incorporating counterarguments and highlights their role in fostering open-mindedness and facilitating discussion. By encouraging the recognition and analysis of opposing views, the teacher stresses a more nuanced aspect of

argumentation. In response to the teacher's question, S10 acknowledges the importance of being open-minded and listening to different opinions. This interaction reveals the teacher's strategy to instil intellectual humility and critical thinking by prompting students to consider the broader implications of their arguments.

Despite the initial steps towards engagement with counterarguments, there is somehow a noticeable gap in how deeply students explore these concepts (a rather common pattern observed largely across the data). The response seems to lack depth in exploring the implications or complexities of integrating counterarguments into their own arguments. This gap is evident as S10's response focuses primarily on the general benefits of openness and acceptance without delving into, for instance, specific examples or detailed analysis of how counterarguments might strengthen or challenge their own positions. The teacher's prompts encourage students to think broadly about the value of considering opposing viewpoints, but there's limited elaboration on how this practice can enhance the quality of their arguments or lead to more robust discussions.

The following excerpt (excerpt 11.4) expands on this theme by providing a concrete example of teacher-student's co-constructing the idea of counterargument and refutation and on what grounds does the refutation builds on.

Excerpt 11.4

T: OK, OK. Can you tell me what you said here and you know why you think it's **insufficient**?

S6: OK, "It can be argued that banning smoking restrict people's freedom of choice. However, for the good health people in general, laws should restrict where people can smoke."

T: OK good, good, good. And you think this is this is insufficient? Yeah, basically you're saying that like the counter argument, **which is this part is insufficient**. Why is that?

S6: Because I think on the reputation they mentioned about laws and on counter argument doesn't have, so I think it's umm **doesn't have enough information**.

T: Umm Banning kind of implies that banning through law. ใช่ไหม [Correct?]

S6: ค่ะ ใช่ค่ะ [Yes. Correct.]

T: ใช่ไหม อ่า [Correct right?] OK. It is **insufficient**. You are correct. Yeah, absolutely correct. Yeah. And you can see that in the way also. Not only that, like it mentioned laws right here. Yeah. Also you can see that in the way that it says the word "**for the good health of people IN GENERAL**." Yeah. So they're trying to say that. Like, you know. Yeah, like in. You know, of course people have. **It shows that they agree**, right? That like, oh, people have the rights. Yes, **people have the rights**. Yeah, to smoke, that's freedom, right? But for people in general, for the wider society, we should ban **WHERE** people can smoke. So they're trying to kind of say that like the counter argument is correct or incorrect? Correct. Right, but not all. Yeah, not all cases. Yeah. So that's why it's insufficient. โอเคไหม [Is that OK?]

S6: โอเคค่ะ [That's OK]

T: OK. I like that we have. So we can see examples like this when you say FOR or something something like this like "for the good health people in general", we're trying to kind of like you know, **make distinction**. Yeah, that like oh, OK. So it's good, but it's good for this case and bad for the other case, something like that. And so we're trying to be

more specific with our generalisation. Yeah. And that's. That's usually how we we do most of our refutation...

In Excerpt 11.4, the teacher and S6 discuss the grounds for S6's counterargument and refutation regarding smoking in public spaces. The teacher guides S6 through an analysis, emphasising that while the counterargument acknowledges some rights, it lacks detailed information and specificity. By highlighting the implications of general statements like "*for the good health of people in general*," the teacher helps S6 refine their argument to improve clarity in argumentative writing. This process potentially encourages analytical thinking as students assess the strengths and weaknesses of different arguments, fostering critical evaluation skills and audience awareness. The discussion on smoking regulations also raises awareness of legal and social issues, balancing individual rights with societal well-being.

Although the teacher encourages deeper engagement by pointing out the need for detailed information and the implications of general statements, S6's responses remain brief and lack elaboration. This interaction highlights the teacher's crucial role in facilitating critical thinking and analytical skills, in line with the early stages of guided criticality. However, it also reveals a consistent pattern of students relying heavily on the teacher for guidance, which may limit their independent critical engagement. By consistently providing detailed feedback and corrections, the teacher perhaps creates a learning environment where students might become overly dependent on external validation rather than developing their own critical voice. While the teacher's input is invaluable for immediate learning, based on Johnston et al.'s framework, this suggests that fostering an environment where students gradually take on more responsibility for their own thinking is essential for their growth towards guided criticality.

In excerpt 14.13, the teacher guides students in exploring the argumentative complexity between freedom of expression and the existence of hate crimes under the topic of anonymity in the online world. Importantly, this excerpt centres on the process of refuting a counterargument regarding the potential contribution of anonymous accounts to hate crimes, ultimately emphasising the paramount importance of freedom of expression:

Excerpt 14.13

T: Basically you're saying that, like freedom of expression is more important.

S3: Yes, than

T: Than the existence of hate crime. Is it? What is it that you're saying exactly?

S3: (3) @ ยากจัง @ คือ *[This is very difficult. It's]*

T: ยาก ยากแต่ทำได้ ต้องฝึกไว้ นี่แหละคือสิ่งที่เราต้องทำให้ได้ *refutation* ยังไงดี *[Difficult but doable. You have to practice. This is what we need to achieve. What should be the refutation?]*

S3: It's more important. umm

T: มีใครอยากจะช่วยเพื่อนไหมคะ อันนี้ {S3} เป็นแอ่อ @ผู้โชคดี@ แต่ว่าคนอื่นสามารถช่วยได้นะคะ จะ *argue* ยังไงดี ตรงเนี่ย นี่ก็ถึงดี เบาๆอะไรอย่างเงี้ย ไขมัน *[Anyone would like to help your friend? {S3} is the lucky one. But other*

people can help. How should we argue here. Think about a debate something like that right?]

S4: เอ่อ หรือว่าประมาณว่า *freedom of expression is more important than the result* เพราะว่าบางครั้ง sometime มันก็ไม่ได้แบบ *lead to* แบบ *wrong way* @Anyway@ [Eh it could be like “***freedom of expression is more important than the result***” because some time it doesn’t lead to a ***wrong way anyway***]

T: อืมๆ เข้าค่านะ เคี้ยวจะถาม {S3} ต่ออะ เคี้ยวขออีกทีได้มั้ย ยังไงนะ [Umm that sounds relevant. I’ll get back to {S3} soon. Can you come again? How?] Freedom of expression is more important than the result. What do you mean by that?

S4: ขออนุญาตเป็นไทยนะคะ @= [Can I say this in Thai?]

T: =ค่ะ= [Yes]

S4: =คือประมาณว่า เพราะผลลัพธ์ในการพูดสปีช *freedom of speech* อะค่ะ บางครั้งมัน ก็ไม่ได้ *lead to crimes* เสมอไป [It’s like a result of a speech, freedom of speech, that does not always lead to crimes.]

T: อืมม โอเค [Umm OK]

S4: น่าจะพูดประมาณว่า [It can be stated that] anonymous account which can create freedom of expressions may not always result in hate crime.

T: A-huh

S4: งมัย หมายถึง การมี anonymous account อะมันช่วยในการ เรื่อง freedom of expression. มากกว่า มันส่งผลให้เกิด freedom of expression มากกว่าการเกิด hate crime [Is this confusing? I mean ***having anonymous account helps more with the freedom of expression. It contributes to freedom of speech than hate crime.***]

T: OK. OK. OK. So what should we say here? I think we’re in a very, very good spot here that we have the idea. We just have to express it. Yeah. So what should we say? Umm. So basically we’re arguing for freedom of expression. Yeah, you can say that hate crime ทำไมอะ ทำไมอะ aren’t ทำไมเอ่ย เคี้ยวๆ อะถาม {S3} ดึกว่าว่า {S3} จะพูดว่าไง [aren’t what? Let’s ask {S3} what should we say here?]

S3: อ้อ จะบอกประมาณว่าเรามีเสรีภาพในการที่จะแสดงความคิดเห็น มันอาจจะสำคัญกว่า เอ่อ Negative thoughts จากที่อื่นๆ อะค่ะ แล้วเราก็สามารถที่จะ ignore หรือว่า ไม่ใส่ใจกับ negative thought ได้ (4) [Oh it can be said that ***the fact that we have freedom of speech may be more important than negative thoughts from other places. And we can choose to ignore or disregard negative thoughts.***]

T: คือเหมือนกับว่า people can ignore hate crimes อย่างนั้นใช่มั้ยคะ [So it’s like people can ignore hate crimes, can’t they?]

S3: ใช่ค่ะ [Exactly]

T: อ่า โอเค [ah OK]

S3: มันไม่ได้สำคัญเท่าการแสดงความคิดเห็น [it’s not as important as being able to express one’s opinion]

T: Uh-huh. Uh. Some may say that allowing anonymous accounts can lead to real, real life crimes. มีคนอื่นจะเพิ่มเติมอีกมั้ยคะ มีอีกมั้ย [Anyone would like to add anything?]

S5: หนุครับ ประมาณว่า hate speech ไม่ได้มาจาก anonymous accounts เสมอไปอะครับ เพราะว่าหลายๆครั้ง มันจะมาจากคนที่มิแอกเค๊าท์จริงมีโปรไฟล์จริง หนุนี้หนุนี้ขึ้นเต็มเลย แล้วก็ แต่ก็ยังพูด hate speech อยู่ อะไรอย่างเงี้ย [I’d like to. ***It may be that hate speech is not always from anonymous accounts because many times it come from real accounts with real profiles but still create hate speech, something like that.***]

The teacher actively engages students in discussions through effective strategies observed in Excerpt 14.13. Probing questions like “What do you mean by that?” help clarify and refine students’ arguments. Encouraging peer support fosters a collaborative learning environment, enhancing both individual comprehension and collective understanding. Additionally, allowing students to switch to Thai when needed acknowledges the role of language in facilitating clearer and more detailed discussions, promoting a thorough exploration of topics.

Despite the teacher's commendable efforts, there is still evidence of surface-level explanations in the students' responses, reflecting with the early stages of criticality described by Johnston et al. (2011). For example, the repetition of simple points, such as the emphasis on "*freedom of expression is more important*," without fully exploring counterarguments or implications, suggests that the discussion does not always reach the desired depth. Students' frequent hesitations and requests to switch to Thai may indicate discomfort or a lack of confidence in engaging deeply with the topic in English, which can result in discussions that do not fully delve into the complexities of the issues. This hesitation and uncertainty highlight the challenges students face in articulating complex arguments in a second language, potentially hindering their ability to engage critically. Consequently, while the teacher's strategies are facilitative, additional measures may be needed to help students overcome these barriers and engage more deeply with the topics being discussed.

The next theme underscores the impact of pro arguments and showcases how students and the teacher further refine their ability to present compelling and substantiated affirmative positions in their arguments.

6.3.3 Reinforcing Pro Arguments through Evidence and Support

This theme explores the dynamics of teacher-student interactions in argumentative writing, where the teacher guides students through constructing compelling arguments. It covers aspects like organisational strategies, using diverse references, and linking examples to the central theme. The teacher fosters a collaborative environment, balancing encouragement with constructive feedback as students navigate selecting, evaluating, and presenting supporting details. In particular, students actively develop pro arguments for anonymous accounts on Twitter, weighing online persona benefits against government intervention for data safety. The teacher facilitates brainstorming, helping students refine their ideas and prioritise stronger arguments, showcasing the collaborative nature of this process.

As the theme progresses, the focus shifts to refining pro arguments by organising examples from general to specific and emphasising the variety of supporting evidence. The teacher encourages students to avoid repetition and to incorporate persuasive statistics effectively. In Excerpt 14.7, a student introduces an anecdotal example from South Korea about information leaks. The teacher then guides the student in linking this example explicitly to the broader theme of identity protection, illustrating how examples can strengthen arguments. Throughout, the teacher underscores the importance of distinguishing between facts and opinions, essential for constructing compelling and persuasive arguments.

Excerpt 14.7

S3: like all all South Korean people have something called RN.

T: Mm-hmm. RN

S3: I mean, what is that and and and this? This is unique to each person and it is used to. Uh, used as an identifier. This number is usually required to register online accounts like games or websites. But for example, in in 2006, hundreds of thousands of RN's were leaked.

T: For what? Leaked?

S3: Yes, from from consumer databases.

T: Ah, so it violated=

S3: =And these RN codes weren't stolen by hackers, but they were sold by company employees with database access.

T: Umm

S3: And and it can. I think it can cause someone to use their name. Or other personal information without your permission to do something bad.

T: OK. So basically you're saying the how I think this is a very good like, you know, of course **anecdotes**, yeah, **an example**. But I think that you had to **link it back** to kind of like, you know why is it bad? you know. To not allow people to have anonymous account. I think **the link is a little bit missing**. Do you know what I'm talking about?

S3: Umm.

T: I think it's it's **implicit**, but you need to make it explicit, right? You're like your reader, or you know, me or อาจารย์ [teachers] who's grading your work. It's not going to, you know, do the, I mean if it's not **directly stated**, yeah, it's going to be kind of like, you know. We're we're not sure if you are we're not sure if you're actually like missing the point or you assume that we we can **connect the dots**. So it's actually safer for you to connect the dots like for us. This one, yeah. The, the, the position here, right, is that people should be allowed to have anonymous account. Yeah, basically you're saying that like people should be allowed to be anonymous online, right? And here **you have an anecdote or a story of how you know when people don't have anonymous account**, right, bad things can happen, but this is the thing that you have to **spell it out**. Yeah, before you give this example. Can you maybe do that?

S3: Got it. I got it.

T: Good. Yeah. So what should we say? I guess this is the thing that I have never really thought about, but like when you use example like this, right? Even though it seems like a repetition, yeah, you need to state it the **general first before the example**. You understand what I'm trying to say. So before you would talk about South Korea. Yeah. And the case of RN being leaked by like, you know, computer like or like companies, you have to say that like, **it is possible that the data, like personal data, right, owned by the company can be leaked** and, you know, create, you know, possible, I don't know, identity theft. Yeah. And then you can say like for example, this is what happened in South Korea. Do you understand what I'm saying?

S3: Like I have to state in general before give an example, right?

T: Yes. เนอะ เข้าใจป่าวคะ [Right. Do you understand?]

S3: เข้าใจค่ะ [Yes, I do.]

(The student's reference to "RN" was not found from my information search, but it likely refers to RRN or "Resident Registration Number," a 13-digit number distributed to all South Korea residents for online identification purposes.)

The interaction between the teacher and S3 illustrates a teaching moment focused on improving the clarity and persuasiveness of an argument. The teacher acknowledges the value of the anecdote but suggests making the link between the example and the argument "more explicit."

The teacher emphasises the need for the student to state the "general" point before providing the "specific" example, thereby guiding S3 to explicitly "*connect the dots*" between the South Korean case of leaked RRNs and the broader argument supporting the allowance of anonymous online accounts. This advice underlines the importance of clarifying why the absence of anonymity can lead to negative consequences.

The teacher's insistence on stating the general principle before the example may likely be a common recommendation for clear and logical argumentation. However, this approach can also be a bit too rigid. It may not always suit the student's unique argument or the particular context of their discussion and may limit the student's creativity and critical engagement with the material. While structure is important, students should also be encouraged to think critically about how they present their arguments. Instead of prescribing a specific format, the teacher could perhaps guide the student to consider why this structure might be effective and then let the student decide how best to express their point. It could be more beneficial if the teacher also encouraged the student to reflect on the broader implications of their argument and to explore various ways to enhance its persuasiveness and depth. For instance, the teacher could prompt the student to consider how the South Korean example connects to larger themes of privacy, security, and digital rights.

The third aspect of this theme captures the use of recognisable evidence and examples to reinforce the pro arguments. The teacher encourages students to make connection to their background or disciplinary knowledge of the topic. In the excerpt 11.3, the teacher introduces a discussion about the right to own handguns in the United States and contrasts it with the absence of such a law in Thailand. The teacher initially engages the students by posing questions and encourages them to guess which amendment in the U.S. Constitution addresses the right to possess arms. This interactive approach involves students like S3 and S4 in the conversation:

Excerpt 11.3

S3: เค้าล่ะ [*I guessed.*]

T: @@@ {S4} เค้าเปล่า [*@@@ {S4} did you?*]

S4: เอ่อ ผมเคยเรียนในวิชา การเมืองเปรียบเทียบครับ= [*I studied this in Comparative Politics.*]

T: =อ้อ โอเค ไหนลองเล่าให้เพื่อนฟังสิคะ *which amendment* [*ah OK Can you explain to your friends please?*]

S4: เอ่อ amendment two ครับ *the right to bear arms*= [*Eh it's amendment two, the right to bear arms*]

T: =We call it the ที่สองเราเรียกว่าอะไร *the* [*We call it the.. what do we call number two in a sequence? The...*]

S4: the the second.

T: Exactly. **We called it the Second Amendment.** Yeah, very, very good. So you can say that it can be argued that people are entitled to, to their rights, yeah to possess handguns according to, we can say to the Second Amendment. Amendment, yeah, in the Constitution

In Excerpt 11.3, students discuss the right to own handguns in the U.S., focusing on the Second Amendment. S4 references knowledge from Comparative Politics to identify the amendment, while the teacher models integrating legal evidence into persuasive arguments. This exercise emphasises grounding arguments in legal foundations and highlights the variability of gun ownership laws between the U.S. and Thailand, enhancing global awareness. However, the teacher's prescriptive guidance, while clear, may limit students' development of their own argumentative style and critical voice. The discussion remains surface-level and concentrates on legal facts without exploring the broader ethical, social, or political implications of gun ownership. Encouraging students to reflect critically on these aspects and explore diverse argumentative approaches could foster deeper engagement and autonomy.

6.3.4 Critical Information Assessment and Source Reliability

In this final subtheme, the focus is on guiding students to critically assess information, discern reliable sources, and navigate biases. The teacher emphasises evaluating sources, understanding the informative value of statistics, and developing skills in assessing expert opinions. The goal is to cultivate a discerning mindset for making informed choices in evaluating information and constructing well-supported arguments. This includes differentiating between authoritative facts and less reliable sources like tabloids, recognising click-bait, and being vigilant about potential biases in statistics and media.

In excerpt 14.15, a student seeks clarification on the acceptability of relying heavily on supporting details from authorities, particularly when constructing an argument:

Excerpt 14.15

S16: And what if I have all of the supporting detail from authorities?

T: Umm.

S16: Like not all of it, but most of it. Like maybe four or five I think.

T: It's actually OK. I think you know authority, let's say it's not all like expert opinions. Yeah, if it's like you have, because you have to, kind of. You know, reference the source like outside sources and anyway. Yeah. And so make sure that, you know, you have it from **different KINDS** of like, you know, **authoritative bodies**. Yeah, maybe some from like **expert opinion**, some from like **governmental policies**, some from like, you know, **report published by like a research institution**. Things like that. You can kind of like see **some variation** within, like using expert opinions or authoritative sources.

S16: OK. Thank you.

The student (S16) asks about relying heavily on authoritative sources, concerned about using four or five such sources. The teacher reassures them that using authoritative sources is

acceptable, emphasising the importance of diversity among sources like expert opinions, governmental policies, and research institution reports. This guidance aims to ensure a well-rounded argument with strong and valid support.

While the teacher's advice on incorporating a variety of authoritative sources is valuable, students should also develop the critical skills to assess the reliability and biases of these sources. Merely citing authoritative sources may not automatically strengthen an argument, as the credibility of a source can vary significantly. For instance, expert opinions may be influenced by personal or institutional biases, governmental policies might reflect political agendas, and research findings can be shaped by funding sources. Moving beyond merely diverse references, students need to engage in a more critical evaluation of the sources they use, which aligns with progressing from early criticality to guided criticality, where they begin to question and assess the integrity of their sources.

In this subtheme, students explore expert opinions on maintaining online personas, focusing on platforms like Twitter. In excerpt 13.5, they analyse expert opinions regarding the Kra Canal Project, highlighting the distinction between facts and opinions and considering potential biases. The lesson includes evaluating a statement from an official website about the project's economic impacts: *“Since it is a huge project, the Kra Canal will become a centre for other developments such as industrial, commercial and residential developments.”*

Excerpt 13.5

T: @Um@ this one? Uh, maybe you can answer this for me? It's from the website of Kra Canal itself, right?

S2: Yes.

T: Yeah? And so. Is it? **Does it have any bias?** What do you think?

S2: I think it is eh um facts or opinion?

T: A-huh Do you think it's facts?

S2: Yes.

T: Umm **it's hard to say that it's a fact**, isn't it? Even though it was written as a fact, right? That Kra Canal WILL BECOME the centre of other developments. But, just because, you know, for this one, I think it's a little bit **tricky** because it's **published by the website itself**. Yeah. Kra Canal dot=

S2: =yeah yeah @

T: @ So you would, you know how like **it's obvious that of course the website is going to say good things, right about about the the project**. Yeah. And so in terms of **biases**, what do you think? **Not not quite bias-free**, right? Yeah. And so we have to be **careful** when we use this because if we eh if we use the information and we cite the information that it's from Kracanal.org, people might, it might actually ruin the credibility of our piece as a whole, right?

S2: Yeah.

T: So, yeah, I might put a star on this and like, be careful. Yeah, I might not want to use it, you know, as a strong support, right? Maybe a side support, but not a strong support unless I have other information to back up this claim, you know what I mean?

S2: Yeah@@

T: Yeah good. Thank you.

In excerpt 13.5, the interaction between the teacher and S2 highlights a pivotal moment in cultivating critical thinking skills within the classroom. S2 initially considers it as facts, but the teacher challenges this perspective by highlighting the potential bias inherent in information published on the project's own website. The teacher explains the “*tricky*” nature of the situation and the likelihood of the website portraying positive aspects of the Kra Canal project. While the student’s affirmative responses are brief, this exchange underscores the teacher's role in guiding students beyond surface-level acceptance of information towards a deeper understanding of bias and critical evaluation. By questioning the objectivity of the source and explaining the likelihood of positive portrayal by the website, the teacher prompts students to approach information with scepticism and discernment.

Importantly, this excerpt illustrates a notable shift in the teacher's approach from earlier prescriptive methods to a more nuanced, critical engagement with the topic. While previous interactions may have emphasised structured argumentation and evidence use, here the teacher encourages students to navigate the complexities of bias and source reliability. Drawing on the developmental framework for criticality (Johnston et al., 2011), this shift appears to help students move toward guided criticality, where they begin to critically assess the credibility of sources and their potential agendas. Beyond this, such critical engagement potentially sets the stage for late criticality, as students deepen their ability to challenge established understandings and develop their own frameworks for evaluating information. By prompting students to look beyond initial impressions, the teacher encourages them to consider the broader context and the motives behind the information they encounter, thereby enhancing their capacity for independent critical analysis.

Overall, the theme highlights the teacher's efforts to guide students in evaluating information sources critically. The excerpts reveal a focus on finding authoritative information from various sources as well as the potential biases in information obtained from official project websites. Importantly, students are guided to question the reliability and potential biases of information sources which fosters a habit of scepticism and discernment. This also underlines an awareness of media literacy and the ability to navigate through different information landscapes while showcasing the teacher’s encouragement to critically evaluate statements and information.

6.4 Summary and Conclusions

In the exploration of “*Scrutinising Criticality in Action*,” three main themes have emerged, each shedding light on the complex process of argumentative development and critical thinking

among students. How does argumentative practice reflect the underlying nature of criticality in this context?

In exploring the first theme, "*Crafting Effective Arguments: The Interplay between Argumentative Structure and Evaluation*," the nature of criticality in education unfolds through the dynamic interaction between structured pedagogical methods and the imperative for creative exploration. Structured frameworks seem to offer essential guidance for students to develop foundational skills in constructing arguments, comprehensively analysing complex subjects, and meeting the expected academic outcomes. Still, this structured approach also poses a challenge: while it ensures clarity and systematic thinking, there's a risk that adherence to rigid guidelines might stifle students' ability to think critically and innovate. It may limit their ability to challenge established norms, explore unconventional perspectives, and engage in more profound and transformative learning experiences. Therefore, the nature of criticality in disciplinary EAP education involves balancing structured guidance with the promotion of creativity and independent thinking. It emphasises providing clear frameworks for academic/linguistic skill development while encouraging students to challenge norms and explore new perspectives on political issues.

The theme "*Critical Discussions, Perspectives, and Debates: Navigating Controversial Issues*" suggests that the current understanding of the nature of criticality involves actively engaging students in dialogue and open debate on controversial issues. Criticality can be seen as a dynamic process where students learn to articulate, defend, and critically evaluate perspectives on contentious topics. However, it also highlights ongoing challenges, such as the need to move beyond superficial understandings to conduct deeper analyses of counterarguments and societal implications. While active participation in rigorous debate and continual exploration of controversial issues are essential aspects of fostering criticality, the tension underscores that achieving this goal is not without obstacles. Superficial understandings and the need for deeper analysis of counterarguments and societal implications represent ongoing challenges that must be addressed to fully realise the evolving nature of criticality. These challenges suggest that while engaged discussions and debates facilitate critical space, a higher degree of criticality might be underdeveloped if the complexities of the issues are not thoroughly explored. This superficial engagement can limit their ability to appreciate the full spectrum of arguments and the underlying nuances.

"*Critical Information Assessment and Source Reliability*" deepens our understanding of the nature of criticality by highlighting its evolution through structured information evaluation and the inherent tensions therein. It portrays criticality as cultivated through rigorous processes of discerning reliable sources, distinguishing between facts and opinions, and navigating biases in

information. These practices equip students with essential skills for constructing well-supported arguments grounded in credible evidence. That being said, the tension arises from the balance between guiding students towards reliable sources and potentially constraining their autonomy in argument construction. While the theme underscores the importance of these foundational skills, it also calls for strategies that empower critical reflection on the broader implications of sources and independent exploration of diverse perspectives. This ongoing challenge underscores the dynamic nature of criticality, where structured guidance and autonomy intersect, highlighting that it evolves through a delicate interplay between structured pedagogical support and fostering students' independent critical thinking abilities.

In addition to the discussed themes, the use of L1 (first language) Thai in classroom interactions has emerged as a notable factor in enhancing student understanding and engagement. The excerpts illustrate how students effectively use their native language to clarify complex arguments, negotiate meanings, and collaborate on ideas. For example, in discussions about online fraud and the balance between freedom of expression and hate crimes, students' use of L1 facilitated clearer articulation of their thoughts and contributed to a shared conceptual framework. The teacher's encouragement to use Thai when necessary further supported nuanced and detailed discussions, enabling students to draw on their cognitive resources and prior knowledge. This highlights the value of leveraging L1 for deepening comprehension and fostering effective peer support, enhancing the learning experience and promoting a more thorough exploration of complex topics.

Given the potential impact of learning mode on engagement and criticality development in this study, it is essential to consider the potential influence of the online nature of the course on student participation and interaction dynamics. Participation primarily through microphone and sometimes with cameras off may enhance comfort but potentially reduces accountability and leads to superficial contributions. Additionally, the absence of non-verbal cues hinders the teacher's ability to gauge students' understanding and engagement, likely complicating efforts to foster deep, critical discussions. Other possible technical challenges, such as poor audio quality and internet lag, can also disrupt the flow of conversation, making it difficult for students to articulate complex ideas or build on each other's points effectively. Moreover, the potential for distractions in an online environment and the different interaction dynamics compared to a physical classroom setting may have an impact on the students' ability to engage deeply with the material. This suggests that while online learning offers conveniences, it also poses challenges that may influence students' depth of engagement and development of criticality to varying degrees.

Chapter 7 Argument Analysis Findings

To address the final research question: “**How do the effectiveness and persuasiveness of students' argumentative writing, particularly in their use of counterarguments and refutations, compare between high- and low-scoring groups, considering both the elements of the Toulminian analysis and the utilisation of appraisal resources?**”, this chapter analyses students' writing to provide concrete evidence of argumentative processes in formal assessments. It explores commonalities and differences in argument construction and the use of appraisal resources between high and low-rated essays. Beyond the Toulminian and appraisal findings, it examines the impact of institutional factors, such as the six essay components, assessment criteria, and examination prompts, on students' writing. This approach highlights potential tensions in criticality development and the connections between instructional practices and student outcomes.

To begin with, the nature of the argumentative essay is discussed here. Students are given a specific task: write a 500-word argumentative essay within a 24-hour online exam. The exam prompt is:

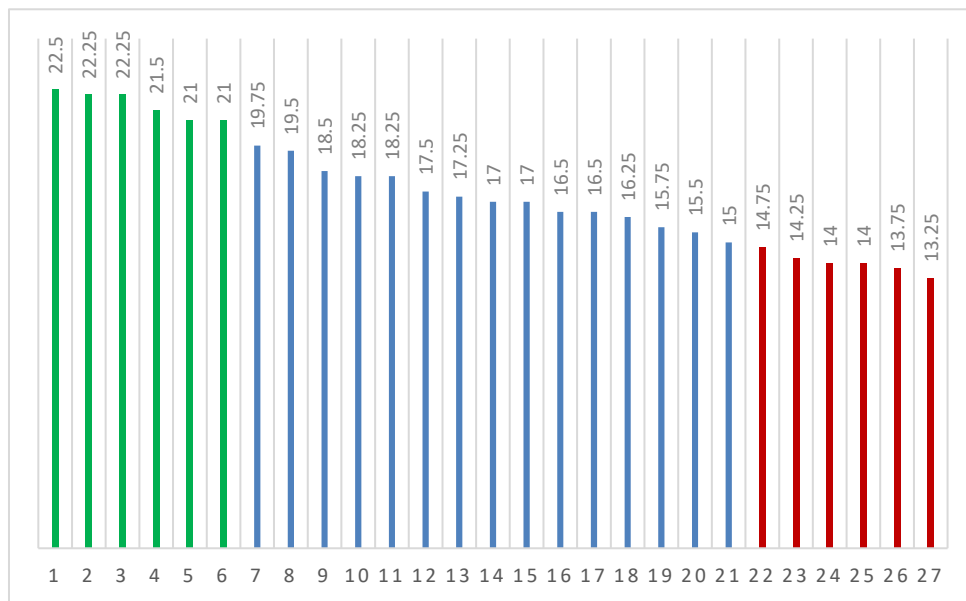
Do you agree or disagree with the following statement?

“Primary school students should be taught about same sex relationships.”

The essay must follow the six-component structure, including an introduction, counterargument, refutation, and two paragraphs for pro arguments, ending with a conclusion. It is crucial for students to stick to the 500-word limit, and instructors will only assess the first 500 words. The use of sources is encouraged, but students are warned against directly copying from them – they need to express ideas in their own words. The assessment criteria emphasise the importance of clear and effective writing, proper use of language, cohesive structure, and giving credit to information sources.

Figure 7.1

Individual scores of the argumentative essays (high and low groups) (27 students)



The scores of the argumentative essay final examination of the EAP course are listed from the highest to the lowest (Figure 7.1) with a total score of 25. Based on a purposive sampling approach, the top six essays (essay 1 to 6), scoring between 22.5 and 21 out of 25 (green), were chosen as representatives of the high-scoring group, while the bottom six essays (essay 22-27), ranging from 14.75 to 13.25, constituted the low-scoring group (red). This intentional selection of essays, where the scores within each group differ by no more than 2 points, provides a focused comparison between high and low-scoring arguments. The close score range ensures that the essays within each group are relatively similar in quality, making the differences between the high and low groups more discernible.

7.1 Toulminian Analysis of Argumentative Discourse

By using Toulmin's model, a benchmark for assessing the quality of student arguments is established, allowing for systematic comparisons across essays to highlight strengths and weaknesses in argumentation. Preceding the appraisal stage, this initial analysis examines critical components of arguments such as the main claim, supported by evidence (data), the underlying assumptions connecting data and claim (warrant), additional justifications (backing), the degree of certainty applied to the claim (qualifier), and potential counterarguments (rebuttal). Besides, the principles of the Toulminian analysis can unravel what's hidden in the texts by systematically deconstructing the argument structure, revealing the students' underlying competencies in critical thinking and logical reasoning. The Toulminian analysis

exposes not only the overt content of the arguments but also the implicit assumptions, logical connections, and areas where the argumentation might be strengthened or is lacking.

7.1.1 High-scoring Group

The high-scoring group (Essays 1-6) exhibits a notable coherence and depth in line with Toulmin's model to construct persuasive arguments that advocate for the inclusion of same-sex relationships in primary school education. To illustrate, the highest-scoring essay, Essay 1, is presented in Table 7.1 below.

Table 7.1

Sample of Toulminian analysis for essay 1 (High-scoring group)

Toulmin Element	Sample Excerpt (Essay 1)	Note
Claim	<i>"Primary school students should be taught about same-sex relationships."</i>	The main assertion of the essay advocating for integrating same-sex relationship education into primary school curricula.
Data	<i>"Many countries started teaching new sex education about same-sex relationships in primary school according to government guidance such as primary schools in England and Ireland."</i>	Provides specific evidence supporting the claim by referencing international practices and government policies.
Warrant	<i>"School can be the appropriate place that children can learn and develop their knowledge about their body and gender identities because school can design the curriculum suitable for students."</i>	Explains why the evidence (data) supports the claim, emphasising the role of schools in curriculum development and education, fostering a supportive environment for learning about gender diversity.
Backing	<i>"According to the research of Socialization of Gender Stereotypes Related to Attributes and Professions Among Young Spanish School-Aged Children, The primary school ages are a vital time for developing gender equality awareness and self-esteem."</i>	Additional support reinforcing the warrant by citing research that underscores the developmental importance of early education in shaping attitudes toward gender equality.
Qualifier	<i>"Therefore, teaching about same-sex relationships helps children understand and respect all gender orientation and also benefit LGBT groups."</i>	Indicates the strength and generality of the claim, suggesting broad benefits beyond the immediate context.
Rebuttal	<i>"Some may argue that teaching children about same-sex relationships is age-inappropriate. According to the statutory guidance of Relationships Education, Relationships and Sex Education (RSE), and Health Education, This topic should be taught at a timely point to children."</i>	Acknowledges potential counter-arguments about age-appropriateness and provides a rebuttal supported by educational guidelines, addressing concerns about comprehension and timing in education.

Essay 1 argues that primary school students should learn about same-sex relationships, using evidence to highlight flaws in the current sex education curriculum. It assumes early education fosters understanding of gender diversity and equality. The essay acknowledges potential objections, such as age-appropriateness, and qualifies the argument by emphasising the timing of content introduction, with a thoughtful rebuttal arguing that primary school is an appropriate setting. The essay aligns with assessment criteria emphasising content comprehensiveness, language accuracy, cohesion, coherence, and reference acknowledgment, crucial for academic

evaluation but potentially prioritising structure over deeper critical analysis. The analysis primarily focuses on basic components and does not delve deeply into warrants, qualifiers, or rebuttals as rigorously as the Toulminian analysis might require. This suggests that while the essay meets the structured essay criteria taught, it may not fully engage with the deeper reasoning and critical evaluation inherent in Toulmin's model.

The rest of high-scoring essays (Essays 2-6) collectively advocate for integrating education on same-sex relationships into primary school curricula, emphasising inclusivity, diversity, and societal progress. They argue that early education fosters understanding and acceptance of LGBTQ+ individuals, positioning primary schools as key in shaping attitudes towards gender diversity and combating discrimination. Essay 2 highlights the societal benefits of pluralistic education, supported by scholars like Joseph Hall and Nancy Barile. Essay 3 employs legal frameworks and expert opinions to support comprehensive education on same-sex relationships. Essay 4 passionately defends social diversity and human rights with legislative examples and research on reducing bullying and promoting respect. Essay 5 underscores the mental health benefits for LGBTQ+ students through early exposure, backed by survey data and expert insights. Essay 6 critiques societal norms and educational policies, advocating for inclusive practices.

Although these essays exhibit strong argumentation and evidence use, with notable strengths in scholarly support, legal backing, and critiques of societal norms, students could benefit from further development in examining underlying assumptions, considering long-term societal impacts, and exploring ethical considerations. Based on the developmental framework for criticality (Johnston et al., 2011), while students at this stage demonstrate early criticality, their ability to deeply engage with counterarguments and ethical implications remains limited, which is understandable given their current levels of language proficiency and academic experience. Focusing on improving clarity in connecting evidence to claims and engaging with more complex societal issues would strengthen their argumentation and contribute to future growth in guided criticality, refining their contributions to advocating for inclusive educational policies.

In essence, several significant patterns emerge among the high-scoring essays. These essays demonstrate a strong adherence to structured essay components, effectively employing Toulmin's elements such as clear claims, well-supported backing from diverse sources, explicit warrants linking evidence to claims, and thoughtful rebuttals to anticipated objections. They excel in logical progression and adhere closely to assessment criteria, ensuring content clarity and cohesive argumentation. While the structured approach to argumentative writing ensures clear and well-supported arguments that align with academic expectations, tensions arise in prioritising form over deeper critical exploration. These essays effectively construct and defend

arguments but may sometimes overlook opportunities to examine broader societal impacts and ethical implications, limiting engagement with complex issues. Insights from the Toulminian analysis can facilitate the development of critical thinking by prompting students to articulate warrants more explicitly, analyse the backing and assumptions behind their claims, and engage with rebuttals in a more nuanced manner.

Furthermore, reflecting on potential conflicts and impacts on institutional contexts, the structured approach encouraged by Toulmin's model seem to align well with conventional academic expectations, fostering clear and well-supported arguments. This approach ensures that students meet established assessment criteria centred on coherence and evidence-based reasoning. However, this emphasis on structured essays and specific assessment rubrics may inadvertently limit the development of critical thinking, as it aligns with early criticality (Johnston et al., 2011), where students are guided by prescribed structures and frameworks. While this approach provides a foundation, it can stifle deeper reflection and exploration of alternative viewpoints, particularly on contentious issues like same-sex education. To foster guided criticality, students would benefit from more opportunities to engage with diverse perspectives, question underlying assumptions, and critically evaluate complex topics beyond surface-level understandings.

7.1.2 Low-scoring Group

The low-scoring group (essays 22-27) offers diverse perspectives on the inclusion of same-sex relationships in primary school education, but with varying levels of coherence and depth according to Toulmin's model. While these essays generally support the idea that teaching about same-sex relationships benefits society, equality, and human rights, their effectiveness in constructing persuasive arguments varies.

Excerpts from the lowest-scoring Essay 27 were initially selected to feature in the sample, but it does not meet the course requirement of six paragraphs for a comprehensive comparison. To maintain consistency in evaluating argumentative quality and adherence to assignment specifications, the next lowest-score Essay 26, which adheres to the requirement with its six components of argumentative structure, is selected for inclusion in the sample excerpts in Table 7.2.

Table 7.2

Sample of Toulminian analysis for Essay 26 (Low-scoring Group)

Toulmin Element	Sample Excerpt (Essay 26)	Note
Claim	<i>"Homosexual relationships should be taught in primary schools in order to uproot the old belief and reconstruct the belief system."</i>	The main assertion advocating for integrating homosexual relationship education into primary school curricula.
Data	<i>"In 2019, the UK government made a policy that required both primary and secondary schools to create a curriculum which teach their students about homosexual and same-sex relationships."</i>	Specific evidence supporting the claim by referencing government policy and educational initiatives.
Warrant	<i>"As human society evolves and people develop their thoughts, the ideas of equality and human rights finally have the attention they deserve, which results in more people questioning and challenging the way of belief."</i>	Explains why the evidence supports the claim, focusing on societal evolution and the need for updated educational approaches.
Backing	<i>"Many studies and research demonstrated that promoting LGBTQ+ would build up better and more supportive environments for young people, which consequently reduce prejudice-based or homophobic bullying in schools."</i>	Additional support reinforcing the warrant by citing research that highlights the benefits of LGBTQ+ education in fostering inclusive school environments.
Qualifier	<i>"Indeed, this practice would effectively close the gap of discrimination, which also strongly encourages equality and rights in schools."</i>	Emphasises the broad benefits and strength of the claim.
Rebuttal	<i>"Some might object that teaching kids about it might be a way to brainwash or take advantage of their innocence and naivety."</i>	Recognises potential counter-arguments about education on homosexuality and provides a rebuttal that addresses concerns about innocence and naivety.

Essay 26 argues for the inclusion of homosexual relationships in primary school education to challenge outdated beliefs, reduce discrimination, and promote equality. However, its argumentation is weakened by a lack of specific statistics or concrete evidence to substantiate claims effectively. The warrant assumes that such education will lead to positive societal changes, citing UK government policies and referencing studies without clearly connecting this support to the main argument, undermining persuasiveness. In terms of qualifiers, Essay 26 demonstrates moderate certainty but falls short in addressing potential objections comprehensively, such as concerns about brainwashing. Reflecting critically using Toulmin's model reveals strengths in presenting a clear claim with moderate certainty but weaknesses in backing with specific evidence and addressing objections, which hinders overall persuasiveness. Integrating specific statistics, enhancing backing, and developing robust counterarguments would strengthen Essay 26's argument for teaching about homosexual relationships in primary schools.

The remaining low-scoring essays (Essays 22-25 and 27) also advocate for same-sex relationship education in schools, underscoring its role in promoting equality and inclusivity.

Essay 23 highlights the importance of this education for advancing human rights, drawing on insights from Michael Bronski and the Universal Declaration of Human Rights. Essay 25 emphasises societal understanding through early education, citing data from the 2013 National School Climate Survey and the 2010 census. These essays argue that early LGBT education can combat discrimination and foster an inclusive environment, yet they often lack depth in addressing religious objections and conservative viewpoints, such as concerns about age-appropriateness and societal norms. Essay 24 argues for normalising same-sex education to prevent sexually transmitted infections and reduce discrimination, but it falls short in clarity and rebuttal depth, despite referencing the Centres for Disease Control and Prevention. Essay 27 uses Birmingham, UK, as an example to highlight societal benefits like empowerment and reduced bullying but lacks a dedicated counterarguments section, impacting its overall persuasiveness. Despite their lower scores, these essays reflect a commitment to addressing critical societal issues.

To enhance persuasiveness and coherence, these essays would benefit from several improvements. Firstly, they should incorporate clearer qualifiers to acknowledge the complexity of the topic and the limitations of their arguments. For instance, Essay 22 could strengthen its argument by explicitly linking early LGBT education to improved social attitudes and academic outcomes, supported by empirical evidence. Secondly, deeper engagement with counterarguments is crucial. Essays like Essay 23 and Essay 25 could expand on their discussions about religious objections and conservative viewpoints, offering robust refutations backed by credible sources. Finally, structuring their arguments to separate counterarguments from refutations would improve clarity and depth, helping to articulate a more compelling case for integrating same-sex relationships education in primary and secondary schools while effectively addressing societal concerns.

Essentially, in the low-scoring essays, several significant patterns emerge in their approach to argument building. These essays tend to exhibit strong claims and initial backing, often referencing credible sources and policies, but they consistently fall short in providing clear qualifiers and robust rebuttals. A common pattern appears to be the lack of detailed engagement with opposing viewpoints and the failure to establish the certainty of their claims. This results in arguments that, while initially compelling, lack depth and fail to address counterarguments effectively. This consistent shortfall in critical components like qualifiers and rebuttals suggests a broader issue in how students are taught to construct their arguments, emphasising form over substance.

Considering these findings within the institutional context, the emphasis on structure may lead students to adopt a formulaic approach, focusing on meeting structural requirements rather

than deeply engaging with their arguments. The assessment criteria, which prioritise content, language, coherence, and evidence-based reasoning, may encourage students to ensure their essays are well-organised and clear, potentially at the expense of a more critical examination. For example, the low-scoring essays often lack detailed rebuttals and qualifiers, suggesting a focus on fulfilling structural components rather than enhancing argument depth. Additionally, issues with language, such as grammar and sentence structure errors, can hinder clarity and persuasiveness, contributing to lower scores. These institutional factors—the structured approach and assessment criteria—likely explain why low-scoring essays, despite having strong initial claims and evidence, often fall short in argumentative depth and quality.

In the next section, the focus expands to include the use of interpersonal resources in constructing counterarguments and refutations. By moving beyond structural elements and logical coherence, this analysis delves deeply into linguistic choices and evaluative language, thereby providing deeper insights into how language shapes persuasion and negotiation in the topic of same-sex relationships in primary school education. This approach not only enhances our understanding of critical discourse but also underscores the importance of linguistic strategies in expressing criticality within argumentative writing.

7.2 Appraisal Analysis on Counterarguments and Refutations

Drawing on systemic functional linguistics, this examination focuses on how students strategically use linguistic resources to engage readers, convey attitudes, and adjust the intensity of their expressions while arguing for or against same-sex relationship education in primary schools. Grounded in Humphrey and Economou's (2015) theoretical perspective, which challenges static viewpoints and promotes the consideration of alternative perspectives, this section of the study investigates the strategic use of language specifically in crafting counterarguments and refutations. The appraisal analysis, based on Martin and White's framework (2005), evaluates whether students maintain a singular viewpoint (monoglossic) or integrate diverse voices (heteroglossic). It assesses attitudes through affect, appreciation, and judgment, and examines how linguistic devices intensify, compare, and focus arguments. This approach provides insights into how students construct persuasive arguments, reflecting critical discourse within the context of same-sex relationship education.

7.2.1 High-scoring Group

The high-scoring group generally demonstrates persuasive language and skilled handling of counterarguments and refutations and provides a critical and well-supported examination of the complexities surrounding same-sex education.

To illustrate, Table 7.3 provides an appraisal analysis of the highest-scoring essay, highlighting the student's use of various linguistic features and expressions to construct their argument. In terms of engagement, the essay initially employs monoglossic language to present a counterargument that states teaching same-sex relationships is age-inappropriate, establishing a singular viewpoint. While emotional reactions are not explicitly expressed, there's a subtle concern for potential confusion in children. The use of language like "age-inappropriate" maintains a consistent focus on the perceived challenges. The refutation then shifts to a heteroglossic approach by incorporating external authoritative sources and hypothetical scenarios, introducing multiple perspectives and enhancing the argument's credibility, such as referencing "government guidance." This lends authority to the argument despite limited explicit emotional expressions.

Table 7.3

Sample of appraisal analysis of Essay 1 (High-scoring Group)

Appraisal Element	Sub-element	Excerpt	Linguistic Features and Expressions	Note
Engagement	Monogloss	<i>"Some may argue that teaching children about same-sex relationships is age-inappropriate."</i>	Declarative statement, singular viewpoint	Presents a common counterargument clearly and without qualification, indicating a direct challenge to the main claim.
	Heterogloss	<i>"According to the statutory guidance of Relationships Education, Relationships and Sex Education (RSE), and Health Education, this topic should be taught at a timely point to children."</i>	Reference to external authoritative source, reported speech	Invokes authoritative guidance to support the refutation, enhancing credibility and introducing multiple perspectives.
		<i>"Some of the children could be confused by the content they've learned; for example, teaching those complex concepts of homosexuality might get children questions about their love towards their friends."</i>	Reported speech, hypothetical scenario	Acknowledges potential emotional reactions and complexities, recognising concerns without fully endorsing them.
Attitudes	Affect	<i>"Some of the children could be confused by the content they've learned."</i>	Emotional reaction, "confused"	Expresses concern subtly, indicating awareness of potential emotional impact on children without strong emphasis.
	Appreciation	n/a	n/a	Explicit appreciation is largely absent in this excerpt. The focus is more on judgement and

				engagement rather than evaluating the intrinsic value or quality of the curriculum itself.
	Judgement	<i>"School can be the appropriate place where children can learn and develop their knowledge about their body and gender identities because school can design the curriculum suitable for students."</i>	Endorsement, "appropriate place"	Evaluates schools positively, suggesting they are well-equipped to handle sensitive topics, though the endorsement is somewhat implicit.
Graduation	Force	<i>"Therefore, same-sex relationship education helps children understand and respect all gender orientation and also benefit LGBT groups."</i>	Intensification, "helps", "understand and respect"	Emphasises the positive impact of the education, reinforcing the benefits through repeated and strong assertions.
		<i>"There isn't too early for primary school students to learn about same-sex relationships."</i>	Intensity, "isn't too early"	Emphatically counters the argument about age-appropriateness, asserting the urgency and importance of early education.
	Focus	<i>"Many countries started teaching new sex education about same-sex relationships in primary school according to government guidance such as primary schools in England and Ireland."</i>	Directs attention to the widespread implementation of such education	Emphasises the widespread and authoritative nature of this educational approach, highlighting its acceptance and credibility.

In Essay 1, the student's approach to argumentative writing reflects a nuanced use of appraisal theory. Attitudinally, the essay subtly acknowledges potential confusion for children, demonstrating sensitivity to emotional reactions without overstating them. Judgment is employed to implicitly affirm schools as suitable venues for teaching about gender identities, though explicit expressions of appreciation are notably absent. This lack of appreciation may limit the argument's depth and richness.

Appreciation in this context would involve evaluating the quality of the curriculum and educational methods discussed. The essay's use of graduation is evident in the intensified language that underscores the urgency and positive impact of early same-sex relationship education. Phrases like "isn't too early" highlight the importance of widespread, authoritative implementation, despite a grammatical error ("*There isn't...*" instead of *It isn't...*"). The interplay between counterargument and refutation is sophisticated. The essay begins with a monoglossic counterargument, presenting a clear stance against teaching same-sex relationships to children. This sets a firm basis for the argument. The subsequent refutation incorporates heteroglossic elements, including authoritative sources like "statutory guidance," hypothetical

scenarios, and reported speech, enhancing its credibility. This strategic use of multiple perspectives and nuanced language demonstrates the student's adeptness in critical discourse. Overall, Essay 1 shows a strong understanding of appraisal resources and discourse strategies, effectively navigating the complexities of the topic.

Essays 2 to 6 reveal consistent themes in their discourse on same-sex relationship education, adeptly balancing counterarguments and refutations to present a nuanced view. These essays acknowledge concerns about age-appropriateness and societal impacts while advocating for the benefits of early education in fostering inclusivity and understanding. They effectively utilise heteroglossia, incorporating references to laws, political figures, and statistical data to enhance credibility and broaden perspectives. For instance, Essay 6 cites the "Don't say gay bill" to highlight concerns about parental control, using phrases like "It's up to the parents to control," and counters with expert opinions noting that "bill regulation makes LGBTQIA+ kids feel more excluded," demonstrating the societal impact of exclusionary policies. Similarly, Essay 4 introduces a Japanese lawmaker's perspective to strengthen the counterargument about potential societal issues and lower birth rates, despite a lack of explicit emotional expressions. Phrases like "LGBTQ+ rights conflict with population conservation" reveal a nuanced understanding of the emotional and societal complexities of the topic, underscoring the essays' depth and credibility through their integration of multiple perspectives and authoritative voices.

While the essays effectively balance the discussion between counterarguments and refutations, some areas for improvement include the explicitness of emotional expressions and the use of intensified lexis to strengthen arguments further. Essays like Essay 5, for instance, while presenting statistical evidence from the YRBS, could benefit from more overt emotional appeals to underscore the personal and social impacts of delayed education. Additionally, a few essays lack explicit intensified lexis, which could enhance the forcefulness of their arguments, particularly in refutations where emphasising the urgency and benefits of early education is crucial. Critical reflection on these aspects could lead to more persuasive and impactful arguments and ensures that emotional, empirical, and rhetorical dimensions are effectively balanced to support claims effectively.

Overall, the high-scoring group exhibits a sophisticated use of persuasive language, effectively engaging in counterarguments and refutations on the inclusion of same-sex relationships in primary school education. These essays skillfully balance monogloss and heterogloss, presenting and addressing multiple viewpoints with nuanced attitudes and judgments. They demonstrate an awareness of opposing perspectives, often supported by references to laws or authoritative opinions. While the tone can be neutral or subtly critical regarding age-appropriateness or societal impacts, the refutations robustly counter these concerns,

leveraging external voices and authoritative sources to reinforce a positive stance. Implicit positive attitudes towards same-sex education reflect an understanding of its benefits and its role in resolving societal issues. The essays achieve a balanced graduation, using intensified language to strengthen their arguments.

7.2.2 Low-scoring Group

The low-scoring group exhibits common weaknesses, including a lack of emotional engagement, limited appreciation for opposing viewpoints, and insufficient depth in exploring diverse perspectives. The limited exploration of emotional or psychological impacts, as well as the lack of critique, contributes to the overall weaknesses observed in this group.

For example, Essay 26 (Table 7.4) primarily uses a monoglossic approach, framing same-sex education in primary schools through a fundamentalist religious lens, describing homosexuality as "unnatural and irregular." This perspective initially excludes alternative viewpoints. However, the essay introduces heteroglossia through reported speech and modal expressions, such as, "Some might object that teaching kids about it might be a way to brainwash or take advantage of their innocence and naivety," which contrasts with the initial stance. The essay employs intensified language, using phrases like "as human society evolve," "finally," and "deserve" to highlight evolving societal norms and emphasise the importance of equality. This strategic use of focus, indicated by "Here are a few illustrative reasons why," directs attention to subsequent arguments after addressing the counterargument.

Table 7.4

Sample of appraisal analysis of Essay 26 (Low-scoring Group)

Appraisal Element	Sub-element	Excerpt	Linguistic Features and Expressions	Note
Engagement	Monogloss	<i>"Following the fundamentalist religious way of thought, homosexual is considered as unnatural and irregular type."</i>	Declarative statement, singular viewpoint	Presents a singular viewpoint based on religious doctrine, framing homosexuality negatively.
	Heterogloss	<i>"Some might object that teaching kids about it might be a way to brainwash or take advantage of their innocence and naivety."</i>	Reported speech, possibility modal "might", plural viewpoints	Introduces a contrasting viewpoint by attributing it to potential objectors, suggesting concern over innocence and education.
Attitudes	Affect	n/a	n/a	Attitudes elements are not expressed in this excerpt.
	Appreciation	n/a	n/a	

Judgement		n/a	n/a	
Graduation	Force	<i>"However, as human society evolve and people have developed their thought, the ideas of equality and human rights finally have the attention they deserve..."</i>	Intensification, comparative morphology "evolve", "finally", "deserve", "more", "worse"	Intensifies the argument by contrasting societal evolution and recognition of human rights against the previous viewpoint.
	Focus	<i>"Here are a few illustrative reasons why."</i>	Directs attention to the forthcoming reasons	Signals a shift towards presenting supportive arguments following the refutation of the counterargument.

Essay 26 notably lacks explicit expressions of affect, appreciation, or judgment, which are crucial for conveying emotional reactions and evaluative depth. The essay primarily focuses on presenting contrasting viewpoints without offering emotional commentary or reflecting the author's evaluative stance on homosexuality and its education. The absence of affect, appreciation, and judgment means the text may not engage readers on an emotional level or demonstrate a nuanced critical engagement with different perspectives. While the essay employs a monoglossic approach to establish a fundamentalist viewpoint and then introduces heteroglossic elements through reported speech and modal expressions, it falls short in conveying the writer's emotional stance or detailed evaluative judgments. The focus is on contrasting societal evolution and traditional viewpoints using forceful language, but without attitude elements, the rhetorical navigation remains more one-dimensional. The lack of emotional and evaluative elements diminishes the essay's ability to humanise the discourse and reflect deeper critical thinking, resulting in a focus primarily on assertive argumentation rather than a more comprehensive and empathetic engagement with the topic.

Essays 22-25 and 27 reveal varied approaches to discussing same-sex education in primary schools, emphasising the need for balanced argumentation, evidence-based reasoning, and emotional engagement. The essays show a mix of monoglossic and heteroglossic elements in their counterarguments and refutations. Essays 22 and 27 largely maintain singular viewpoints, lacking exploration of alternative perspectives and emotional nuances, while Essays 23, 24, and 25 incorporate heteroglossia through citations and reported speech, adding depth and authenticity to their arguments. A notable strength is their use of authoritative sources and statistical evidence, such as CDC data in Essay 24 and academic citations in Essays 23 and 25, which bolster their claims and enhance credibility. This integration of evidence supports a well-rounded discussion and reinforces the essays' persuasive impact.

However, there are areas for improvement across these essays. One recurring issue is the need for deeper emotional engagement and exploration of societal attitudes towards LGBTQ+ issues.

While some essays touch on emotional resistance and conservative objections, such as Essays 22 and 23, there is often a lack of explicit emotional language or exploration of the psychological impacts on affected individuals, which could strengthen their arguments. Additionally, Essays 25 and 27 could benefit from clearer separation between counterarguments and refutations to enhance the overall structure and coherence of their arguments. Moreover, enhancing the use of intensified language and ensuring a more nuanced critique of opposing viewpoints could further bolster the essays' persuasiveness and depth of analysis.

Overall, the low-scoring essays, including Essay 26, reveal a complex interplay of strengths and weaknesses across their argumentative analyses. While these essays often falter in elaborating on counterarguments and refutations which leads to a lack of clarity and depth in addressing opposing viewpoints, they also demonstrate attempts at introducing heteroglossic elements and intensified language to bolster their arguments. However, these efforts are inconsistently executed, with some essays failing to effectively separate and develop counterarguments and refutations cohesively. Moreover, the essays generally lack emotional engagement, failing to convey a nuanced understanding of societal attitudes towards LGBTQ+ issues and their emotional impact. The limited use of authoritative sources further diminishes the credibility of their arguments. Moving forward, enhancing the structure, coherence, and emotional resonance in these essays is crucial for fostering deeper reader engagement and strengthening their persuasive impact in discussions on sensitive educational topics.

7.3 Summary and Conclusions

In examining the nuances of argumentative writing through the Toulminian and appraisal analyses, this study illuminates how students navigate formal criteria and contextual challenges to construct arguments in their essays. By integrating structural foundations with rhetorical strategies, the analyses underscore the multifaceted nature of critical engagement in academic discourse. These insights not only enhance our understanding of argument construction from theoretical perspectives but also inform pedagogical approaches aimed at fostering deeper critical thinking among students in disciplinary EAP and political science education.

Both high-scoring (Essay 1-6) and low-scoring essays (Essay 22-27) exhibit similarities and differences in their approach. High-scoring essays demonstrate strong adherence to structured components and assessment criteria, featuring logical progression, clarity, coherence, and sophisticated language use. However, this focus on formal criteria may prioritise structural form over deeper engagement with complex issues and ethical dimensions, potentially resulting in arguments that lack depth. In contrast, low-scoring essays show some basic but inconsistent

adherence to structured frameworks, often lacking clear organisation, coherence, and depth in argumentation. They frequently have vague introductions and present evidence superficially, reflecting weaker connections between ideas and insufficient support for claims. While structured frameworks support organisational coherence and academic rigour, they may hinder the development of deeper criticality by encouraging students to prioritise meeting formal requirements over engaging deeply with content and critically evaluating multiple perspectives.

The Toulminian analysis provides insights into the robustness of argument quality. High-scoring essays excel in meeting formal criteria and organisational coherence but may prioritise structural form over exploring complex issues and ethical dimensions. This emphasis may constrain criticality, which requires deep analysis and evaluation from multiple perspectives. In contrast, low-scoring essays reveal challenges in integrating critical analysis effectively, with gaps in identifying warrants, assumptions, and counterarguments, reducing overall persuasiveness. Language appears to play a critical role: high-scoring essays demonstrate clarity, precision, and sophistication, enhancing argumentative rigour, whereas low-scoring essays often lack such clarity and use simplistic or verbose language. Interestingly, word counts do not significantly differ between groups: This suggests that the word limit of 500 itself may not be a primary factor in scoring differences. Instead, aspects like argumentative structure, depth of analysis, and engagement with counterarguments likely play more decisive roles. To conclude, while structured frameworks enhance organisational coherence and meet formal criteria in argumentative writing, they may inadvertently prioritise form over deep critical analysis of complex issues. Therefore, criticality in this context suggests a capacity for rigorous analysis and thoughtful exploration beyond the confines of structured frameworks alone.

Nonetheless, it is important to note that contextual factors, such as the fixed structure of essays, stringent assessment criteria, and limited instruction on rhetorical strategies, play a significant role in shaping students' approaches to argumentative writing. These factors can influence students to focus more on meeting formal requirements rather than engaging deeply with the subject matter. The impact of these contextual constraints will be explored in greater detail in the discussion chapter, which will delve into how these factors might contribute to the observed patterns in students' writing and suggest practical implications for enhancing critical engagement in academic settings.

For appraisal, the analysis of high-scoring and low-scoring essays on same-sex education in primary schools reveals distinct patterns in rhetorical effectiveness and critical engagement. High-scoring essays exhibit a strong command of persuasive language, adeptly handling counterarguments and refutations with a more balanced use of monoglossic and heteroglossic elements. They skilfully present nuanced perspectives supported by authoritative sources and

empirical evidence, demonstrating a sophisticated understanding of critical engagement by integrating emotional and rational dimensions. In contrast, low-scoring essays show weaknesses in emotional engagement, depth of analysis, and coherence in argument structure. They often rely on monoglossic approaches and lack robust integration of external voices and critical perspectives, limiting their ability to engage fully with the topic. This comparative analysis underscores the pivotal role of rhetorical strategies and appraisal resources in shaping the overall effectiveness of argumentative discourse, emphasising the importance of developing students' skills in integrating diverse viewpoints, employing credible sources, and fostering both emotional and rational engagement to craft persuasive and nuanced arguments.

Together, these analyses offer a dual perspective on expressing criticality in argumentative writing. The Toulminian analysis highlights the structural foundations and formal requirements that support rigorous academic writing. It underscores the importance of clarity, coherence, and adherence to argumentative frameworks in constructing persuasive arguments.

Conversely, the appraisal analysis enhances this understanding by emphasising the rhetorical strategies and engagement with diverse viewpoints that enhance the persuasiveness and depth of arguments. This reveals how criticality emerges not only from logical argumentation but also from the ability to engage deeply with complex issues, consider multiple perspectives, and articulate nuanced viewpoints effectively. By moving beyond a singular focus on structural integrity, the combined analyses encompass broader dimensions such as rhetorical effectiveness, emotional engagement, and ethical considerations in political science.

In the next chapter, I will further explore how these findings shed light on broader theories, implications for pedagogy, curriculum development, and fostering critical thinking skills among students.

Chapter 8 Discussions and Conclusions

This chapter synthesises the findings of the study on criticality development within English for Academic Purposes (EAP) for political science. It delves into the dynamics between EAP and disciplinary perspectives, scrutinises the practical application of criticality in argumentation, and unpacks the role of discourse and evaluative language in shaping persuasive and critical arguments. Through examining the interplay of pedagogical frameworks, rhetorical strategies, and contextual factors, the chapter highlights the evolving nature of criticality and its implications for teaching and learning in tertiary education. The chapter concludes with a discussion of key findings, implications for EAP and disciplinary education, and recommendations for future research, aiming to provide a comprehensive understanding of how to enhance criticality through argumentation in diverse settings.

8.1 Drawing Conceptual Boundaries for Criticality

The interconnectedness of criticality and argumentation within English for Academic Purposes (EAP) for political science is both profound and nuanced. This section explores how critical thinking serves as the essential foundation for constructing well-supported arguments and how argumentative practices, in turn, foster deeper critical engagement. Drawing on perspectives from EAP and political science educators, this study underscores the multifaceted nature and conceptualisations of criticality, encompassing questioning, analytical depth, and rational thinking. It examines the implications of rigid argumentative frameworks and the role of contextual challenges, such as English proficiency and the shift to online learning, on the development of critical thinking skills in a Thai university setting.

8.1.1 The Dynamics of Criticality and Argumentation: Bridging EAP and Political Science Perspectives

The findings of the study revealed that criticality and argumentation were deeply interconnected, with critical thinking as the foundation for constructing well-supported arguments. The teachers who participated in this study viewed criticality as involving questioning, analytical depth, and rational thinking, which they believed extended beyond mere opinion-holding. They stressed how important it is that their students engaged in critical discussions, and analysed diverse perspectives, because they felt that this enhanced their students' ability to argue persuasively. In this study, argumentation, with its structured approach to building coherent arguments, supported critical thought by helping students fulfil rhetorical functions and use evidence effectively. However, these findings suggested that an

overemphasis on technical aspects and rigid structures could limit deeper critical engagement. Students might focus on ticking off structural requirements rather than engaging with the content deeply, potentially leading to formulaic thinking and constrained creativity.

While these conceptualisations highlighted the interdependence and nuances between critical thinking and argumentation, this relationship appeared contingent upon the flexibility and adaptability of argumentative practices to move beyond mere structural adherence from both disciplinary and EAP perspectives. The political science educators in this study emphasised an expansive view of criticality that involved informed questioning, integrating extensive background knowledge, and engaging with diverse, often conflicting perspectives. They viewed political science as inherently interdisciplinary and deals with multifaceted issues that required a deep understanding of context, history, and theory. According to them, the overall goal was to develop students' abilities to think critically about political and social phenomena, which involved questioning assumptions and integrating diverse viewpoints. This likely explained the focus on broader perspectives and contextual understanding that prepared students for real-world political analysis, where the ability to engage with conflicting viewpoints and complex issues was considered crucial.

In contrast, the EAP teachers in this study prioritised logical coherence and analytical questioning, focusing on immediate analytical skills and precise scrutiny. They viewed this focus as ensuing that arguments were well-organised and clearly articulated, which they believed benefited students by enhancing their ability to construct logical and evidence-supported arguments. Because EAP's primary goal in this study was to equip students with the skills needed to succeed in academic settings where clarity, coherence, and logical structuring of arguments were essential, the structured approach was seen as helping students effectively communicate their ideas and meet academic standards. The focus on argumentation structure was also perceived as supporting language development and writing proficiency, which the teacher considered critical for academic success in any discipline. Based on these findings, honing these skills ensured that students could produce persuasive and well-organised written work. Still, the form of argumentation defined in this context may have limited the fuller capacity to develop criticality as defined by both political science and EAP teachers. The rigid structures of argumentation in this EAP course might have constrained students from achieving the broader, more exploratory engagement with multiple perspectives that political science encouraged.

The present study highlights the fundamental link between critical thinking and argumentation, with criticality as the foundation for constructing well-supported arguments. This aligns with Dunne's (2015) view that higher education should promote criticality through informed

questioning and diverse perspectives. Dunne's emphasis on integrating background knowledge complements Atkinson's (1997) focus on assessing arguments across various contexts, stressing the importance of cognitive skills, evaluative judgments, and contextual sensitivity. These perspectives suggest that criticality involves a nuanced understanding of content and context, reinforcing the study's findings on the complex nature of critical thinking. Atkinson's assertion that personal beliefs and cultural backgrounds shape criticality explains the variation in teachers' conceptualisations of it, aligning with the view that critical thinking is deeply tied to domain-specific knowledge and cognitive skills (Willingham, 2007). Facione's (1990) traits of inquisitiveness and openness resonate with Barnett's (1997) and Simpson's (2020) views on critical thought, which emphasise openness to debate and the evolving nature of criticality. This underscores that developing critical thinking involves not only cognitive skills but also engagement with diverse and evolving perspectives, supporting the study's findings on the interconnectedness of critical thinking and argumentation.

Also, the study highlights that while criticality in political science education is deeply intertwined with argumentation, there are nuances in how these concepts are applied and valued across different educational contexts. Research underscores the importance of effective organisation in argumentative writing, which establishes authority and coherence (Chang & Schleppegrell, 2016; Wingate, 2012; and Bitchener, 2017). Their findings align with an argument that critical thinking and structured argumentative practices are crucial for higher education (Andrew, 2015). This relationship suggests that strong argumentation skills are built on a foundation of critical thinking, supporting the idea that well-supported arguments are grounded in rigorous critical engagement. Leedham (2015) extends this discussion by emphasising that "good" writing involves clarity, brevity, the integration of visuals, and adherence to discipline-specific norms. In political science, where argumentative writing must align with complex disciplinary standards, these factors are particularly important for establishing credibility and coherence. This alignment ensures that arguments not only meet academic expectations but also reflect a deep understanding of the field's norms and practices.

The structured approach to argumentation in the EAP course, while promoting logical coherence and precise scrutiny, may inadvertently limit deeper critical engagement. Although integrating critical thinking with structured argumentation is supported by research, rigid adherence to these frameworks can constrain the depth of analysis. Yanchar, Slife, and Warne (2008) critique method-centred approaches in psychology, arguing that an overemphasis on procedural aspects restricts analytical scope and overlooks deeper theoretical assumptions. Bharuthram and Clarence (2015) similarly highlight the importance of approaching academic reading as a complex, disciplinary practice rather than a basic skill. They argue that critical reading is essential for developing argumentation skills, as it involves analysing texts,

recognising persuasive elements, and considering multiple perspectives. Without a strong foundation in critical reading, students may struggle to construct nuanced arguments, missing the theoretical and rhetorical dimensions of texts. Adapting argumentative practices in EAP to accommodate the unique demands of political science, while allowing flexibility for deeper analysis, may better support the development of both critical thinking and effective argumentation skills.

Clarence (2014) offers valuable insights into disciplinary practices in political science and law, particularly emphasising the distinction between "knower codes" and "knowledge codes." In political science, as a knower code, the foundation for success lies in developing specialised critical thinking skills and becoming a critical knower. This perspective aligns with the present study's findings, which highlight the crucial role of critical thinking in constructing well-supported arguments. Clarence critiques pedagogical approaches in political science, noting the tension between a broad theoretical understanding and the depth required for effective critical engagement. This resonates with the observation that structured argumentative frameworks in EAP can sometimes lead to formulaic thinking, constraining deeper analysis. While political science prioritises specialised critical thinking within a theoretical context, Clarence suggests that an overemphasis on broad theoretical frameworks can limit the depth of analysis necessary for critical engagement. Integrating disciplinary knowledge more prominently into EAP could address this issue by supporting students in applying theoretical concepts within the context of critical, specialised analysis. This approach would allow EAP courses to maintain clarity and coherence while fostering more exploratory engagement, enabling students to develop nuanced arguments and interact critically with diverse viewpoints. Such integration would enhance students' ability to become specialised critical knowers in political science, aligning more closely with the complex argumentation required in the discipline.

This integration of disciplinary insights is supported by Andrews (2015), who underscores the importance of clear organisation and coherence in argumentative writing. His work highlights that effective argumentation requires a structured approach to guide readers through a logical sequence of ideas, ensuring clarity and persuasiveness. This structured approach aligns with the pedagogical goals of many EAP courses, which prioritise teaching students to construct well-organised arguments. However, Ferretti and Lewis (2018) challenge this by arguing that effective argumentation involves engaging with multiple perspectives, addressing counterarguments, and acknowledging the complexities of the issue. Their emphasis on exploring alternative viewpoints supports the notion that EAP's rigid structures might constrain students from achieving the broader, exploratory engagement encouraged in political science. To address this, integrating interdisciplinary approaches could offer a balanced strategy,

merging the technical proficiency emphasised in EAP with the broader engagement valued in political science. Additionally, exploring the role of digital literacy in fostering critical thinking and argumentation could help students navigate and critically engage with diverse perspectives in increasingly digital educational contexts.

Overall, while mastering the technical aspects of argumentation—such as constructing clear introductions, formulating position statements, incorporating counterarguments, and providing refutations—is crucial for developing coherent and persuasive arguments, it is equally important to encourage students to engage in deeper critical engagement. This involves not only following prescribed structures but also challenging assumptions, synthesising conflicting viewpoints, and exploring the broader implications of their arguments. Regarding the nature of criticality, as defined by both political science and EAP educators in the study, argumentation should not be viewed solely as a mechanical process of fulfilling rhetorical functions but as an opportunity to foster independent analysis and reflective thinking. By encouraging students to go beyond rigid frameworks and engage with multifaceted perspectives, educators can enhance the capacity for criticality. Therefore, a balanced approach is necessary, where technical instruction is complemented by opportunities for students to engage in substantive critical thinking. This approach ensures that students are not only proficient in argumentation but also capable of applying critical thinking to explore and synthesise multifaceted perspectives, thereby enhancing their overall analytical capabilities.

8.1.2 Contextual Influences on Criticality: English Proficiency, Digital Literacy, and Online Learning

To further elaborate on the conceptualisation of criticality and argumentation, it is essential to consider the contextual factors from this study that add another intricate layer of interpretation. Conducted in Thailand, the study highlights English proficiency as a pivotal factor influencing the development and application of criticality in EAP for political science. Given that English serves as the primary medium for accessing global academic discourse and scholarly resources, students' proficiency in English potentially impacts their ability to engage deeply with complex socio-political issues and diverse perspectives. Proficient English skills enable students to navigate and critically evaluate a broad array of academic texts, theories, and methodologies that shape contemporary political discourse. Moreover, proficiency in English facilitates effective participation in international debates, fostering a nuanced understanding of global issues and enhancing students' capacity to contribute meaningfully to academic and professional arenas. Such emphasis on English proficiency underscores its dual role in enhancing both linguistic competence and critical thinking skills. The ability to comprehend and critically analyse English-language academic literature empowers students to formulate

informed opinions, challenge prevailing assumptions, and synthesise diverse viewpoints within their field of study. However, it is crucial to recognise that an exclusive reliance on English texts may inadvertently marginalise perspectives from non-English speaking scholars, potentially limiting the breadth and inclusivity of critical discourse within the classroom. Therefore, enhancing English proficiency in this context is not just about language skills but also about broadening students' access to diverse perspectives in another language and fostering inclusive, critical engagement with global academic discourse.

The challenges English language learners face in mastering organisational patterns for academic argumentation are well-documented. The struggles learners, particularly those from different cultural backgrounds, encounter in adapting to the linguistic and structural demands of English academic writing have been documented (Bacha, 2010; Hirose, 2003; Hirvela, 2013). This difficulty reflects a broader issue where learners are expected to internalise unfamiliar frameworks, impacting their ability to construct persuasive arguments. Hood (2004, 2010) and Tardy (2012b) further elucidate how L2 writers struggle to integrate language patterns that establish authority and coherence, a challenge compounded by limited exposure to academic discourse conventions (Bitchener, 2017; Hood, 2004). These studies suggest that the rigid emphasis on specific organisational patterns in EAP courses might narrow focus, potentially limiting engagement with broader aspects of argumentation. The study's findings align with these observations, indicating that an overemphasis on mechanical aspects could overshadow critical thinking skills, such as questioning assumptions and exploring broader implications. Integrating insights from disciplines like political science, which value exploration of perspectives and theoretical depth, could enhance students' ability to engage critically with complex issues. While structured frameworks provide a foundation for clear argumentation, fostering a more nuanced approach that supports both technical skills and critical thinking is crucial for enriching students' argumentative and analytical capabilities.

Andrews (2015) highlights the critical role of English proficiency in enabling students to navigate and engage with academic discourse effectively, facilitating access to scholarly resources and enhancing their contributions to academic debates. Beyond linguistic competence, English proficiency is vital for critically analysing and synthesising information from various texts (Ferretti and Lewis, 2018), especially in disciplines like political science. This proficiency not only opens access to theoretical frameworks and methodologies (Hood, 2004) but also fosters deep engagement with complex socio-political issues and diverse perspectives, promoting critical thinking and informed analysis (Tardy, 2017). However, Canagarajah (2002) warns that an exclusive focus on English can marginalise non-English speaking scholars, advocating for multilingual scholarship to enrich critical discourse and promote inclusivity. Thus, while English proficiency is essential for EAP in political science in Thailand, efforts should also broaden

students' exposure to diverse perspectives and foster critical engagement across linguistic boundaries. This balance is crucial for developing criticality and ensuring rigorous, inclusive academic discourse.

Given the predominance of online learning during the pandemic, it is essential to understand how these digital challenges intersect with the development of critical thinking and argumentation skills, adding an additional layer of difficulty. The pandemic has amplified the need for students to develop strong digital literacy skills, enabling them to critically evaluate sources, discern credible information, and navigate online discussions effectively. The digital age's impact on information consumption and emotional variations highlights the need for critical approaches to well-rounded information searching and comprehensive understanding of socio-political issues, directly relating to the foundational bedrock of critical thinking. The difficulties in formulating clear positions, navigating counterarguments, and substantiating claims emphasise the necessity of mastering argumentative skills and engaging with diverse perspectives. The nature of criticality in this context is, therefore, not only shaped by the linguistic demands of engaging with English-language academic texts but also by the ability to critically engage with the digital information landscape. Students are more likely to encounter information that aligns with their pre-existing views, limiting their exposure to diverse perspectives.

As Erarslan and Arslan (2019) contend, the transition to online learning has been met with both commendations and criticisms among students, highlighting the inherent difficulty in maintaining interactive engagement and receiving immediate feedback essential for nurturing critical thinking. Bird et al. (2022) also reveals a nuanced picture, where while digital environments offer flexibility, they also pose significant hurdles such as connectivity issues and distractions, which can hinder the development of robust critical thinking skills, especially among less experienced learners. Furthermore, Amin et al.'s (2023) findings elucidate the pivotal role of digital literacy in enhancing critical thinking abilities, suggesting that integrating these skills into EAP curricula is paramount. Institutional responses further highlight the proactive measures taken by higher education to embed digital literacy across disciplines, aiming to equip students with the analytical tools needed to navigate today's information-rich yet complex digital milieu (Schettini, 2024). While the flexibility and accessibility offered by online platforms can enhance students' ability to engage with diverse perspectives and access a broad range of resources, the challenges posed by digital distractions and the lack of immediate, interactive feedback can hinder their ability to develop critical thinking skills effectively. For L2 learners, particularly those from non-English-speaking backgrounds, the integration of digital literacy into EAP instruction is not merely about familiarising them with new

tools but about enabling them to critically engage with and navigate complex information in a digital context.

Considering these challenges, the implication for the nature of criticality in L2 learners is profound. It suggests that while digital environments offer new avenues for learning, they also require a tailored approach to teaching critical thinking. This approach must address the dual challenge of enhancing language proficiency and digital literacy, ensuring that students can critically evaluate information and engage in meaningful discourse within an increasingly digital world. The necessity for a holistic strategy in EAP instruction becomes clear—one that integrates traditional critical thinking skills with digital literacy. We can mitigate the negative impacts of the digital shift on students' critical thinking and argumentation skills, ensuring they are adept at critically evaluating information and effectively participating in socio-political discourse.

8.2 Scrutinising Criticality in Action

This section discusses the nature of criticality development in this disciplinary EAP context by examining how pedagogical frameworks and instructional strategies shape students' argumentative skills. It evaluates the balance between structured guidance and fostering independent thought, assessing how these approaches impact students' critical engagement. Additionally, it considers the role of advanced rhetorical strategies and the use of first-language (L1) resources in enhancing critical thinking and argument development.

8.2.1 Balancing Structure and Criticality: The Role of Pedagogical Frameworks in Argumentative Writing

The study found that a structured pedagogical approach in teaching argumentative writing offered significant benefits by ensuring clarity and consistency, aligning with course objectives and evaluation criteria. Observations revealed that this approach provides students with essential tools for constructing well-supported arguments. The clear framework helped guide students in organising their thoughts systematically and meeting academic standards, facilitating skill development in key areas like coherence, cohesion, and referencing. Particularly, for students with varying English proficiency, a structured approach can provide a clear and uniform set of guidelines. This ensures that everyone, regardless of their proficiency, has a common framework to follow, and this can bridge gaps in their language skills and provide them with a clearer path to meeting the course objectives. It can also enable focused and targeted feedback, ensuring that students understand how to refine their arguments and meet course expectations, while standardising assessment to ensure fair and consistent evaluation.

The findings in this study highlighted the strengths of a structured pedagogical approach to teaching argumentative writing, particularly its emphasis on clarity, coherence, and adherence to specific components such as counterarguments. This method aligns with the principles advocated by Andrews (2015) and Hirvela (2017), who argue that structured argumentation is essential for developing students' ability to construct persuasive and well-supported arguments within their academic disciplines. By providing a clear framework, this approach ensures that students can systematically organise their thoughts and meet academic standards, effectively addressing key aspects such as coherence, cohesion, and referencing. This uniform set of guidelines is especially beneficial for students with varying levels of English proficiency, as it bridges gaps in language skills and offers a common path to understanding and applying argumentative concepts (Bitchener, 2017; Harrell & Wetzel, 2015). Additionally, the alignment with course objectives and evaluation criteria allows for targeted feedback, ensuring fair and consistent assessment across different proficiency levels.

However, this structured approach may inadvertently limit opportunities for deeper critical exploration. The reliance on predefined frameworks can lead students to focus more on meeting set criteria rather than fostering innovation or challenging conventional perspectives. Brookfield et al. (2019) and Bacha (2010) suggest that integrating reflective practice and flexibility within structured approaches can deepen students' understanding and encourage them to question their assumptions and viewpoints. This observation resonates with Barnett's (1997) conceptualisation of criticality, which emphasises the importance of openness to diverse perspectives and the questioning of norms. Similarly, from a critical pedagogy perspective, Canagarajah (2005) and Crookes (2012) contend that while structured approaches provide clarity, they should also encourage students to explore alternative perspectives and engage in creative, independent thought. To fully nurture criticality, effective pedagogical strategies should not only guide students through structured processes but also foster an environment where questioning assumptions and exploring unconventional viewpoints are integral to the learning experience (Hirvela, 2017; Hüttner & Smit, 2018). This balanced approach can facilitate a more refined development of criticality, equipping students with the skills to navigate complex arguments and contemporary challenges, such as misinformation and media literacy.

The study found that discussions and debates on controversial issues like same-sex marriage, domestic violence, and political propaganda fostered a more dynamic form of criticality. These discussions exposed students to diverse perspectives, encouraged open dialogue, and promoted analytical skills as they evaluated and articulated different viewpoints. Engaging with societal and ethical implications, students were also challenged to think critically and empathetically. However, while these debates fostered active participation, they often

remained superficial and teacher-dependent. For example, in debates on same-sex marriage, students could express their views but struggled to explore the underlying reasons behind opposing perspectives, reducing complex stances to simplistic labels. This limited engagement suggests only a partial realisation of criticality. Additionally, teacher-led discussions, such as those on online fraud, showed effective knowledge organisation but fell short of fully exploring ethical and societal ramifications. To deepen their understanding of criticality, students need to engage more independently in analyses that consider the broader impacts and ethical considerations of contentious issues. Moving beyond surface-level participation to a more profound examination of the nuances and implications of arguments is essential for effective critical discourse.

Considering critical thinking and critical reflection, the study highlights the importance of democratising learning environments through methods such as gathering student feedback, peer collaboration, and reflective practice (Brookfield et al., 2019). Brookfield's emphasis on using multiple lenses for critical reflection—including students' perspectives and theoretical frameworks—suggests that incorporating more structured reflective practices could address the observed partial realisation of criticality in student discussions. This approach aligns with Atkinson's (1997) multifaceted view of critical thinking, which involves cognitive skills, evaluative judgments, and contextual sensitivity. The superficial nature of certain classroom debates may reflect a lack of developed evaluative judgment and contextual sensitivity among students, indicating a need for deeper engagement with complex arguments.

8.2.2 The Pursuit of Critical Engagement: Navigating Rhetorical Strategies and Contextual Factors in Argumentative Writing

This section shifts to advanced strategies in crafting persuasive arguments, focusing on rhetorical devices, counterarguments, and source evaluation. The study's analysis of classroom interactions revealed that the teacher's emphasis on assertive language and clear positions fostered a direct argumentative style, encouraging well-defined stances. Findings from classroom observations indicated that strong conclusions, proposing solutions or making predictions, reinforced cohesive narratives, prompting critical thinking about argument culmination. Discussions on engaging opposing viewpoints and using counterarguments, as evidenced in the data, were found to develop intellectual humility and critical thinking. The study further highlighted how guiding students in organising arguments and linking evidence to central themes refined their ability to make explicit connections between evidence and claims. Importantly, the study highlighted that emphasising source evaluation cultivated discernment in assessing information quality. A pivotal moment identified in the data occurred when the teacher challenged a student's reliance on authoritative sources, highlighting potential biases

and encouraging a more nuanced approach to criticality. This interaction exemplifies the teacher's role in advancing critical thinking beyond surface-level acceptance of information.

The study highlights strengths in instructional practices aimed at enhancing advanced argumentation skills. By integrating sophisticated strategies like rhetorical devices, counterarguments, and critical source assessment, the approach enriches students' argumentative capabilities. Atkinson (1997) and Andrews (2015) advocate for embedding critical thinking within subject-specific contexts, aligning with the study's focus on discipline-specific argumentation. Willingham (2007) underscores the challenges of transferring critical thinking across contexts, supporting the need for explicit, content-connected teaching strategies. Bacha (2010) adds practical insights on modelling argumentative structures and incorporating feedback, which complement structured approaches (Bitchener, 2017; Harrell & Wetzel, 2015) that refine skills through iterative feedback (Hyland & Jiang, 2018). These practices not only build foundational skills but also address contemporary challenges like misinformation (Harrell & Wetzel, 2015). Hüttner and Smit (2018) stress the importance of teacher guidance and interaction in developing subject-specific language proficiency, reinforcing the benefits of a structured, feedback-driven approach.

While the structured guidance provided is integral to developing strong argumentative skills, it exposes several critical limitations and challenges. The rigid focus on specific rhetorical strategies and structured formats, like clear position statements and predefined argument structures, may inhibit students from exploring diverse argumentative styles and engaging deeply with content. Such rigidity risks overshadowing rhetorical approaches that embrace complexity and subtlety, particularly those prevalent in Thai cultural contexts that often favour indirectness. Moreover, the online nature of the course significantly affected student participation and interaction dynamics. Reliance on microphones and the frequent absence of visual cues, as students kept their cameras off, may have reduced accountability and led to more superficial contributions. This environment can make it difficult for teachers to accurately gauge students' understanding and engagement, thus complicating the facilitation of profound, critical discussions. Also, technical issues such as poor audio quality and internet lag further disrupted the flow of conversation, hindering students' ability to articulate complex ideas or effectively build on each other's points. These conditions exacerbated the tendency towards formulaic engagement with counterarguments, where students introduced opposing views without substantial analysis or integration into their primary arguments. They potentially imposed significant barriers to fostering deep critical engagement and the development of effective argumentative skills.

The reliance on teacher feedback in the online context can foster dependence on external validation rather than developing independent critical thinking. Encouraging experimentation with various argumentative strategies and deeper engagement with counterarguments could enhance critical thinking and lead to more nuanced arguments. This critique aligns with the view on criticality, which values openness to diverse perspectives (Barnett, 1997), and concern about rigid structures restricting argumentative exploration (Atkinson, 1997). Willingham (2007) supports this critique by noting the challenge of transferring critical thinking skills across contexts and advocating for adaptable frameworks. Observations in online settings reveal that students often presented counterarguments formulaically, with limited analysis or integration, partly due to potential distractions and different interaction dynamics. These challenges suggest that while online learning offers conveniences, it also posed obstacles that may impact students' depth of engagement and critical thinking development.

To address these limitations, a more flexible and adaptable approach to argumentation is worthy of consideration. The importance of developing students' argumentation skills through a nuanced understanding of context-specific practices, which suggests that rigid, formulaic structures may not fully accommodate the diverse argumentative styles students encounter (Charles, 2007). Similarly, a dynamic approach to teaching argumentation that allows students to adapt their strategies based on varying contexts and audiences (Thompson, 2013) and the need for fluid instructional strategies that extend beyond formulaic methods (Bacha, 2010) are advocated. The role of cultural and contextual factors in shaping learning strategies is also highlighted (Canagarajah, 2005), suggesting that rigid argumentative structures may neglect diverse styles and limit critical engagement. This perspective is crucial as the study reveals that students' exploration of varied argumentative styles was often constrained by standardised formats. Stapleton and Wu (2015) and Hirvela (2017) endorse the need for balancing structured guidance with nuanced perspectives to address contemporary challenges like misinformation and media literacy. Their views align with the call for engaging students in debates (Harrell & Wetzel, 2015) and the focus on refining arguments through diverse perspectives and effective teacher guidance (Hüttner & Smit, 2018). The observed limitations in students' argumentative skills reflect a broader need for flexibility in instructional practices and confirms existing patterns in the literature suggesting that more dynamic, context-sensitive approaches

Last but not least, when considering the complex and nuanced nature of criticality in this EAP context, it is essential to acknowledge the significant role that L1 Thai plays in enhancing cognitive and collaborative processes. This approach aligns with the view that L1 facilitates intersubjectivity and scaffolding, allowing students to build on existing knowledge and manage cognitive load effectively (Antón & DiCamilla, 1999). By enabling students to articulate complex arguments and negotiate meanings more effectively, L1 facilitates a deeper grasp of intricate

topics. For instance, using L1 in debates on sensitive topics like online fraud or freedom of expression provided clearer articulation for developing and refining arguments. L1 use reduces cognitive overload and fosters coherent collaboration, thus enhancing critical engagement (Scott & Fuente, 2008). This not only supports nuanced discussion but also allows students to build upon their existing knowledge and cognitive resources. For multilingual speakers, they can maximise their learning potential by leveraging their entire linguistic repertoire, emphasising that increased activation of L1 resources can enhance multilingual skills (Cenoz & Gorter, 2021). The teacher's support for L1 use further illuminated its importance in fostering a comprehensive and inclusive learning environment. Still, Shabir (2017) cautions that while L1 aids comprehension and reduces anxiety, over-reliance on it can hinder L2 development. Balancing L1 use with target language instruction ensures that it complements rather than replaces language learning, promoting both critical thinking and language proficiency. Such a strategy supports engagement and understanding while also promoting language proficiency.

8.3 Unpacking Discourse for Criticality

This section explores how criticality is expressed and shaped within students' argumentative writing, focusing on the effectiveness of their persuasive strategies. By analysing both high and low-scoring essays, the study provides insights into how students exhibit critical engagement within the confines of EAP for political science. The prompts, structures, and assessment criteria set by the course play a significant role in shaping students' writing, influencing how they construct and articulate arguments. Rather than directly addressing the abstract nature of criticality, this discussion examines how robust argumentation and the use of interpersonal resources, informed by theoretical perspectives including Toulmin's model and appraisal theory, contribute to the expression of criticality in students' work. Through this lens, the study seeks to better understand the ways in which argumentative writing can foster or limit the development of critical discourse.

8.3.1 The Architecture of Persuasion

In examining the effectiveness and persuasiveness of argumentative writing, the findings from both high and low-scoring essays reveal important insights into the development of criticality within argumentative writing. The high-scoring essays demonstrated a commendable adherence to structured components, such as clear claims and well-supported evidence, aligning closely with Toulmin's model. They exhibited strong logical progression, effective use of evidence, and a well-defined warrant linking the evidence to the claim, indicating a solid grasp of academic argumentation. These essays tended to feature clear rebuttals to

counterarguments, which strengthens their overall persuasiveness. However, these essays often prioritised structure over deeper critical engagement, lacking nuanced exploration of underlying assumptions and broader societal impacts. This suggests that while students excelled in meeting formal criteria, there was an opportunity to enhance their critical thinking by encouraging more profound examination of the ethical and societal dimensions of their arguments. Conversely, the low-scoring essays revealed patterns of strong initial claims and backing but fell short in qualifiers and rebuttals. They often lacked clear warrants, which weakened the connection between their claims and evidence. This limitation reflects a broader issue of superficial engagement with counterarguments and a lack of depth in addressing complex issues. The tendency to meet structural requirements without fully exploring opposing viewpoints suggests that the emphasis on form may have constrained students' critical exploration. Additionally, low-scoring essays frequently exhibited issues with coherence and clarity, often presenting vague or unsupported claims, which further detracted from their overall persuasiveness.

In light of these findings, several studies (Stapleton & Wu, 2015; Bruce, 2020; Hyland & Jiang, 2018) offer valuable insights into the nuances of Toulmin's model and its application in academic writing. High-scoring essays excelled in structured components—clear claims, supported evidence, logical flow, and defined warrants—matching Toulmin's model. They also presented stronger counterarguments and refutations, skilfully using rebuttals and qualifiers to address opposing views. This mirrors the trend observed by Hyland and Jiang (2018), where academic writers increasingly use linguistic tools and structures to guide readers through coherent and compelling texts. This approach significantly enhances their overall persuasiveness and logical coherence. Conversely, low-scoring essays, which exhibited inconsistent use of the Toulminian elements, struggled to achieve the same level of cohesion and persuasiveness. Stapleton and Wu (2015) highlight significant limitations in how counterarguments are addressed, aligning with the deficiencies observed in these essays where rebuttals and qualifiers were inadequately utilised. Bruce (2020) further underscores the challenge of integrating critical thinking consistently, noting that critical statements were distributed throughout essays without a discernible pattern. This inconsistency likely impacts coherence and overall argumentative impact. Therefore, while high-scoring essays demonstrated strong adherence to Toulmin's model, both high and low-scoring essays would benefit from an improved approach to integrating critical perspectives and addressing counterarguments more effectively.

For the low-scoring essays, Bruce's (2020) observations on coherence relations further support the finding that struggles with the consistent application of Toulmin's model parallel difficulties in maintaining uniform critical engagement in lower-scoring work. Low-scoring essays often lack

clear warrants, weakening the connection between their claims and evidence, and exhibited issues with coherence and clarity. This also aligns with Bruce's (2020) observation that critical statements were distributed throughout essays without a discernible pattern, indicating a more integrated yet less uniform approach. This suggests that while critical statements were present, their placement and organisation did not follow a consistent or predictable structure across samples. This variability reveals the challenge of effectively integrating critical thinking into written arguments and impacts overall coherence and persuasiveness. Similar limitations in less effective arguments are identified, such as failure to rebut all counterarguments, misalignment between counterarguments and rebuttals, ineffective rebuttals, and weak reasoning (Stapleton & Wu, 2015). These issues resonate with the current study's observations of low-scoring essays, where inconsistent and superficial use of Toulmin's model undermined logical structure and persuasiveness. The alignment between Stapleton and Wu (2015) and the present study reveals the importance of effectively integrating counterarguments and rebuttals to enhance argumentative writing which points to the need for more robust and coherent application of Toulmin's model to improve critical engagement and overall argument quality.

The institutional context—where an emphasis on structural adherence might lead students to focus more on fulfilling formal requirements rather than deeply engaging with content—likely exacerbated these issues. The structured approach and assessment criteria may have inadvertently fostered a formulaic mindset, overshadowing critical exploration. The multidimensional view of criticality provides insight into how institutional contexts might shape students' approach to argumentation (Atkinson, 1997). This perspective highlights that a narrow focus on structural adherence fails to encompass the full spectrum of critical engagement. Atkinson's view supports the notion that institutions emphasising structural criteria might inadvertently limit students' ability to engage critically with content and context. Similarly, Brookfield's (2019) emphasis on critical reflection through various lenses, including students' perspectives and theoretical frameworks, directly addresses this issue. Brookfield suggests that critical reflection—considering not just structural elements but also content, context, and broader implications—can counteract a formulaic mindset.

Adding to this discussion, Li's (2024) meta-ethnographic qualitative study underscores that many non-native English-speaking (NNES) students in higher education continue to struggle with expressing criticality and argumentation in their academic work. Furthermore, Li identifies challenges in applying disciplinary knowledge effectively within writing practices. These findings align with Willingham's (2007) argument that effective critical thinking requires more than adherence to structural frameworks; it demands domain-specific knowledge and cognitive strategies. Without sufficient support in integrating disciplinary knowledge and language skills, students may face significant barriers to achieving deeper engagement. This interplay between

institutional emphasis on structure, challenges in expressing criticality, and the role of disciplinary knowledge emphasises the need for a balanced approach. By moving beyond formulaic instruction and fostering critical reflection and integration of content, context, and cognitive strategies, educators can help students overcome these barriers and engage more fully with academic discourse.

8.3.2 The Power of Evaluative Language

The appraisal analysis of counterarguments and refutations largely supported the theoretical framework of critical discourse used in the present study. Findings showed consistent use of evaluative language, engagement markers, and graduation resources to reflect critical engagement and challenge opposing viewpoints, aligning with the Onion model (Humphrey & Economou, 2015). This model's critical level integrates persuasion within critique, using linguistic tools such as concessive conjunctions to signal shifts in position. High-scoring essays demonstrated sophisticated use of evaluative language and balanced exploration of counterarguments, while low-scoring essays lacked coherence, presenting vague claims and ineffective engagement with counterarguments. This inconsistency undermined argument quality and highlighted challenges in achieving the critical level described by the Onion model. However, contextual factors like language proficiency and cultural influences revealed discrepancies that the framework may not fully address.

The contrasting findings between high-scoring and low-scoring essays revealed nuanced ways in which critical and persuasive discourse were developed. High-scoring essays employed appraisal resources such as engagement and attitudinal language to construct nuanced arguments, refuting opposing views while reinforcing the writer's stance. This resonates with Bruce's (2020) findings that attitudinal markers, such as hedging and attitude phrases, enable writers to express their stance, manage reader engagement, enhance persuasiveness, and facilitate critical dialogue by reflecting nuanced positions, acknowledging complexities, and inviting debate. These markers are crucial for developing arguments that are both balanced and reflective, aligning with Bruce's findings on effective critical writing. The significance of evaluative language in constructing persuasive and credible arguments are endorsed by Hyland (2008, 2012, 2017) who echoes the social principle of developing an authoritative position in academic writing. This suggests that the command of evaluative language and engagement with counterarguments, observed in high-scoring essays, reflects broader disciplinary conventions (Hyland, 2008). This also resonates the Onion model's emphasis on critical engagement with sources and theories.

Furthermore, the importance of cohesive features and logical progression in enhancing argument clarity and persuasiveness are evident in academic writing. The use of explicit cohesion, including linguistic resources to connect ideas and maintain flow, contributes to effective argumentation in student essays (Hyland and Jiang, 2018). High-scoring essays also demonstrated the critical role of evaluative language in establishing authority and guiding reader interaction, aligning with Abuhasan (2021). These essays effectively utilised attitudinal lexis and engagement markers, reflecting a sophisticated grasp of critical discourse. Abuhasan emphasises that continuous use of evaluative resources like engagement and attitudinal words strengthens students' arguments by asserting authority and addressing diverse perspectives. In the present study, high-scoring essays applied these appraisal resources strategically to construct counterarguments and refutations, enhancing their overall persuasiveness. This distinction highlights that while Abuhasan focuses on the emotional expressiveness and vividness of appraisal resources, the current study examined their role in developing nuanced arguments and critical engagement. Both perspectives underline the importance of appraisal resources in making academic writing more flexible, authoritative, and compelling.

While metadiscourse was not directly analysed in the study, it provides a broader understanding of how appraisal resources and structured frameworks contribute to effective academic writing. Metadiscourse complements appraisal by managing reader engagement and structuring arguments, which aligns with the study's findings on high-scoring essays (Devira & Westin, 2021; Dreyfus et al., 2016). Devira and Westin (2021) stress the importance of explicit modelling and genre awareness in critical review writing. They demonstrate that clear structural frameworks and detailed examples facilitate the strategic use of evaluative language and rhetorical strategies. This supports the observation that high-scoring essays effectively utilised attitudinal lexis and engagement markers to enhance argument clarity. In contrast, Dreyfus et al. focus on the role of metadiscourse and interpersonal metafunctions, highlighting how these elements manage reader relationships and enhance argumentation. Their work underscores how high-scoring essays employ metadiscursive features—such as textual, interactive, and reflective types—to guide readers and build credibility. While Devira and Westin (2021) elucidate how explicit modelling and genre awareness enhance the strategic use of evaluative language in high-scoring essays, Dreyfus et al. (2016) provide a deeper interpretation of how metadiscourse complements appraisal by managing reader engagement and enhancing argumentation. Metadiscourse, which includes elements like hedging, emphasis, and engagement markers, relates to appraisal by structuring and contextualising the writer's stance and evaluation of information. This interplay ensures that high-scoring essays not only adhere to a clear structural framework but also use rhetorical strategies to guide the reader's understanding and interaction with the text. Examining appraisal and interpersonal resources in

argumentative writing reveals how evaluative language and engagement strategies enhance critical discourse by allowing students to construct and present arguments with greater depth and nuance.

Essentially, while structured frameworks such as Toulmin's provided essential scaffolding for organising arguments, as found by the present study, the essence of criticality in academic writing lay in the adept use of linguistic resources and the sensitivity to contextual influences. The findings revealed that true critical engagement transcended mere structural adherence and required a nuanced integration of evaluative language and discursal strategies tailored to specific academic contexts. This approach not only enhanced the depth and persuasiveness of arguments but also reflected a deeper level of critical thinking that acknowledged the complexity of academic discourse. Building on this understanding, the subsequent section will explore how to effectively combine these dual aspects—structural frameworks and linguistic resources.

8.3.3 Making Argumentative Writing More Critical: Integrating Structural and Rhetorical Approaches and Contextual Considerations

The integration of the Toulminian analysis and appraisal theory in the present study offered a clearer understanding of criticality in political science argumentative writing. Toulmin's model provided a structured approach to dissecting arguments, revealing how well-defined claims, warrants, and qualifiers contributed to the clarity and robustness of arguments. Concurrently, appraisal theory enhanced this understanding by further examining how evaluative language and engagement markers infused arguments with critical depth and nuance. For instance, the use of hedging and attitudinal markers, as noted in the appraisal analysis, not only strengthened the argument by presenting a balanced view but also revealed the writer's critical stance, awareness, and engagement with opposing viewpoints. By combining these frameworks, we gain a more holistic view of what constitutes effective critical engagement in writing. This interplay underscores that criticality is not merely about adhering to a structural format but also about strategically using language to reflect deeper critical engagement and persuasiveness.

Moreover, this integrated approach illuminated how structural and rhetorical elements interacted to enhance argumentative writing. High-scoring essays leveraged the Toulminian elements to build well-supported arguments and simultaneously employed appraisal resources to navigate complex discourses and reflect critical insights. This dual approach showed that effective critical writing involved not only mastering the technical aspects of argumentation but also utilising evaluative language to engage with and critique diverse perspectives. Therefore, the implications for academic practice for argumentative writing are quite significant.

Integrating insights from Toulmin's model and appraisal theory suggests a need for instructional strategies that emphasise both the structural and linguistic aspects of argumentation. Based on these insights, educators should focus on teaching students to construct arguments with clear, logical structures while also providing opportunities to foster the ability to use evaluative and engagement markers to enhance criticality and persuasiveness. This combined perspective can guide curriculum development and assessment practices, ensuring that students are equipped to produce more sophisticated and critically engaged academic writing.

Educators and EAP practitioners should also be aware of contextual influence. As the present study unfolded, these factors significantly impacted how students approached and constructed their essays, which in turn likely affected the application of Toulmin's model and appraisal theory. The fixed structure of argumentative essays and stringent assessment criteria often led to a formulaic approach, where students seemed to prioritise structural conformity over nuanced critical engagement. Limited instruction on rhetorical strategies and time constraints could have further hindered students' ability to deeply engage with complex issues and diverse perspectives. This resulted in a constrained use of evaluative language and rhetorical strategies, affecting the overall effectiveness of their arguments. Understanding these contextual influences is crucial for interpreting how Toulmin and appraisal insights are applied in practice and highlights the need for instructional approaches that address these limitations. By acknowledging these constraints, we can better appreciate the challenges students face and work towards developing strategies that foster both structural proficiency and critical engagement in argumentative writing.

In essence, the integration of Toulmin analysis and appraisal theory not only deepens our understanding of criticality in argumentative writing but also provides a comprehensive, more well-rounded perspective for enhancing disciplinary EAP practices in this area. By bridging these approaches, we are able to gain valuable insights into how students can develop and express criticality through both structured argumentation and strategic use of language, ultimately contributing to a more refined and effective academic discourse.

8.4 Conclusions and Implications

This qualitative case study offers a rich, multifaceted view of criticality development within EAP for political science, revealing significant patterns and nuanced insights through a detailed analysis of conceptual boundaries, practical enactments of criticality, and the expression of criticality in argumentative writing. The findings reveal significant patterns and nuanced insights into the development of criticality. First of all, the conceptual framework provides a foundational understanding of criticality as a multifaceted construct. It defines criticality not

merely as the ability to construct arguments but as a comprehensive skill involving the engagement with diverse perspectives, the challenge of prevailing assumptions, and the application of sophisticated rhetorical strategies. This sets the stage for examining how criticality is developed and manifested in practice and writing. Furthermore, classroom observations offered practical insights into how criticality is nurtured through structured argumentation practices. Teachers' approaches to controversial topics, such as sex education and online identity/privacy vs. freedom of speech, revealed a pattern where criticality was actively fostered through systematic instruction and engagement with complex issues. These observations reaffirm that criticality is not a static attribute but a dynamic process shaped by pedagogical strategies. Structured argumentation helped students navigate and critically assess different viewpoints and provided opportunities for fostering deeper intellectual engagement and promoting a nuanced understanding of political issues. Finally, the empirical analysis of student essays provided a concrete measure of how criticality is expressed in written work. High-scoring essays demonstrated a sophisticated use of Toulmin's model and appraisal resources, reflecting students' ability to construct well-supported arguments and address counterarguments effectively. Conversely, low-scoring essays revealed challenges in applying Toulmin's elements and appraisal resources, indicating gaps in students' ability to produce coherent and persuasive arguments. This analysis highlights a pattern where students who excelled in argumentative writing integrated both structural elements and evaluative language which showcased a deeper understanding of critical discourse.

Importantly, integrating conceptual understanding, practical classroom practices, and empirical writing analysis revealed that criticality development is a dynamic, interconnected process. In this disciplinary language learning context, the nuanced nature of criticality was highlighted by the interplay between field-specific and language teaching focuses, the prominence of structured approaches in EAP, and contextual influences. This alignment ensured that students not only grasped theoretical concepts of criticality but also translated them into practical skills in discussions and written arguments. A nuanced definition of criticality, shaped by both contextual and disciplinary factors, is essential. In political science, criticality emphasised deep engagement with complex issues, political theories, and diverse perspectives. This contrasts with EAP's focus on structural and linguistic proficiency in argumentation. The difference in focus—content depth in political science versus argument structure in EAP—indicates the need for EAP to better incorporate disciplinary content. This does not mean adopting a Content and Language Integrated Learning (CLIL) approach but suggests that EAP should more effectively bridge general language proficiency with specific content. An integrated approach to criticality in EAP should therefore include both structural clarity in argumentation and deep engagement with disciplinary content. The structured

approaches in EAP demonstrated how clear pedagogical strategies support criticality development, ensuring students effectively structure their arguments and engage meaningfully with their discipline's content.

Observations of EAP teaching confirmed that this structured guidance helped students master the components of effective argumentation. However, this structured approach may have oversimplified complex content, leading to challenges in integrating nuanced arguments within the prescribed framework. For instance, while incorporating diverse perspectives is crucial for fostering open-mindedness and empathy in education, the challenge of relativism can arise when students perceive all viewpoints as equally valid without critically validating and justifying their argument. Therefore, it is essential to balance the exploration of various perspectives with critical examination based on evidence and logical reasoning. Effective pedagogical strategies should address this balance, ensuring that while students engage with diverse viewpoints, they also develop the ability to critically assess their validity. This approach can enhance students' criticality, supporting their ability to engage meaningfully with complex issues and contribute to the pursuit of knowledge beyond the structured frameworks typically used in the classroom. Thus, while structured guidance is beneficial, it should be adapted to accommodate the complexity of the subject matter. Also, encouraging students to apply their conceptual understanding and instructional guidance in writing reveals how criticality is manifested in practice. High-scoring essays often showed a sophisticated application of argumentative structures and effective use of appraisal resources, demonstrating students' ability to produce well-supported and critical arguments. Conversely, low-scoring essays highlighted difficulties in integrating content with structure, affecting the persuasiveness and coherence of arguments. This practical application stresses the need for students to not only understand theoretical concepts but also apply them effectively in their writing.

As the present study unfolded, contextual factors played a crucial role in shaping the development of criticality in Thai higher education, where political sensitivities, language proficiency, and the shift to online learning, collectively influenced how students engaged with and developed critical thinking skills. Political sensitivities could limit the scope of discussion and critical engagement with certain controversial topics, thereby restricting students' ability to explore and argue diverse perspectives. English proficiency likely affected students' capability to articulate and develop nuanced arguments, impacting the depth and effectiveness of their critical thinking. The transition to online learning also presented challenges such as diminished face-to-face interaction and potentially inconsistent access to digital resources, which could reduce engagement and hinder the development of robust argumentation skills. It is also important to consider the potential impact of other contextual factors, such as the availability of comprehensive academic resources. Although this factor was not explicitly examined in the

current research, it is reasonable to speculate that limited access to academic resources could further constrain students' ability to conduct in-depth analyses and build well-supported arguments. Such constraints might affect their overall critical thinking and argumentation skills. Potentially, these contextual factors mediated the nature of criticality in this research by highlighting the need for tailored pedagogical strategies that address these barriers. This can ensure that students are supported in developing the skills necessary for effective critical thinking and argumentation.

In essence, the interplay of different focuses—disciplinary depth and language structure—highlighted the need for an integrated teaching approach that combines content mastery with structural scaffolding. The structured approach in EAP serves as a tool for developing argumentation skills, though it must be tailored to the complexity of the content. Contextual influences revealed that criticality development is not a linear process but one shaped by ongoing interactions between pedagogical strategies, theoretical insights, and practical applications. Effective criticality development requires an integrative approach that ensures conceptual understanding, instructional practices, and practical application are cohesively aligned within the context of disciplinary practices and content. This approach recognises that criticality is shaped by how well these elements are interwoven, reflecting the interconnected nature of theoretical insights, pedagogical strategies, and real-world application. To deepen our understanding of this developmental process, I turn to Johnston et al.'s (2011) framework, which offers a developmental spectrum on how criticality evolves in the social sciences and humanities, and explore how it aligns with the dual frameworks of "Learning to Argue" and "Arguing to Learn" to interpret the evolving nature of argumentation and criticality in this context.

8.4.1 The Evolving Nature of Criticality Development: From Argument as Foundation to Argument as Inquiry

The interconnection between criticality and argumentation reveals unique insights into the nature of criticality development within this disciplinary EAP context. Johnston et al.'s (2011) framework of early, guided, and late criticality offers a valuable lens for understanding this progression. I frame this as a synthesis necessary for bridging the gap between the theoretical discussions and the practical observations made in the present study, helping to illustrate how criticality and argumentation co-evolve in disciplinary contexts. *Early criticality involves* tentative engagement with critical strategies; *guided criticality* reflects a more secure control with occasional challenges; and *late criticality* signifies mastery, marked by confident and independent reshaping of frameworks. This model aligns with the observed progression in students' argumentation skills, helping to track how they developed from applying basic

techniques to independently challenging and reshaping frameworks. By capturing this developmental trajectory, the framework provides a more comprehensive picture of how students' criticality evolved in response to both language and disciplinary content. Moreover, from an argumentation perspective, this model aligns with the "Learning to Argue" framework, which supports foundational stages, and "Arguing to Learn," which reflects deeper understanding through dialogue (Zou et al., 2021; Hirvela & Belcher, 2021). By applying these frameworks, we can interpret how students' argumentative practices align with theoretical perspectives on critical thinking development, illustrating the general developmental nature of criticality. While this study is not longitudinal and does not track changes over time, it provides a snapshot of students' practices at a specific point, which can be situated within broader theories of critical thinking and argumentation to understand potential trajectories of development.

In its early stages, the nature of criticality is exhibited by tentative engagement with critical strategies, often relying on established frameworks and guidance from educators. This stage is marked by a foundational understanding of argumentation but limited autonomy in challenging existing norms or perspectives. "Learning to Argue" emphasises the structured development of argumentative skills such as through Toulmin's model and the argumentative components learned in this EAP course. It highlights argumentation as a product of reasoning, aiming to equip students with foundational skills in constructing clear and persuasive arguments. In the early stages of criticality, as observed in the study, students exhibited this reliance on structured frameworks and instructional guidance. This phase aligns with the "Learning to Argue" framework, characterised by students acquiring foundational skills in organising and justifying arguments. High-scoring essays, for instance, demonstrated proficiency in structuring arguments logically and coherently, as analysed through Toulmin's model. Strijbos and Engels (2023) support this view by identifying key strategies—construction, confirmation, problematisation, and regulation—as central to effective argumentation. These strategies reflect the structured argumentative techniques emphasised in "Learning to Argue" and corresponds to *early criticality* where students are learning to apply these structured techniques under guidance.

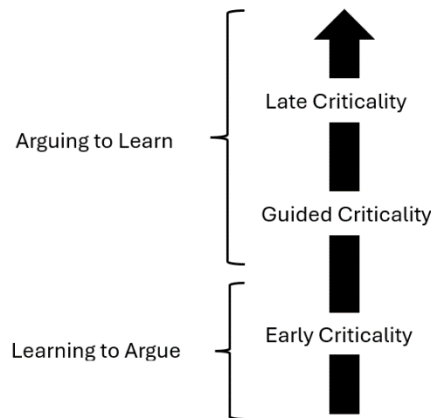
As criticality develops, its nature reflects in students' increasing ability to engage more deeply with diverse perspectives and counterarguments within structured frameworks and signifies a deeper, more autonomous exploration where students critically assess and challenge foundational assumptions, leading to a more nuanced and independent understanding of complex issues. This characterises "Arguing to Learn" which underscores argumentation as a process for inquiry and understanding which emphasises collaborative argumentation and dialectical discussions, where students engage in active dialogue to deepen their

comprehension of complex topics. It encourages students to challenge assumptions, critically engage with opposing viewpoints, and collaboratively seek solutions. This approach aligns closely with Johnston et al.'s concept of *guided* and *late criticality*, where students move beyond mere persuasion to engage in sophisticated, autonomous critical thinking. Students potentially demonstrate *guided criticality*, showing more secure control over critical strategies and occasionally challenging conventional understandings. In the study, the high-scoring essays likely exemplified *guided criticality* by showcasing students' ability to construct persuasive arguments, effectively engage with counterarguments, and integrate diverse perspectives—all within the structured framework prescribed by the EAP course. Such progression in the study reflected students' ability to handle counterarguments, substantiate claims with diverse evidence, and analyse complex political issues from multiple perspectives. The more interactive and dialogical aspects of Strijbos and Engels' (2023) findings, such as patterns of deliberative communication and the role of subjective arguments, illustrate how argumentation serves as a means to engage deeply with material.

While current examples of advanced critical thinking were evident in both essays and classroom discussions, the progression towards *late criticality* involves pushing beyond these established boundaries. This stage requires students to challenge norms and exhibit greater autonomy in reshaping argumentative frameworks, both in their written work and in their interactions during class discussions. To illustrate, a pivotal moment observed in the study occurred when a teacher encouraged a student to question the reliability of an official source, such as a government website, which may contain inherent biases. This encouragement marked a shift towards a more nuanced understanding of and a critical take toward sources and reflected a promising path toward *late criticality*. It demonstrated a pedagogical strategy that encouraged students to critically evaluate the credibility of their sources, even from its original or official ones, which is crucial for advanced argumentation. While these findings show promising signs of *late criticality*, it is important to acknowledge that achieving full mastery would require further development and continued refinement of critical engagement over time. Importantly, Johnston et al. (2011) caution against expecting undergraduate students to consistently attain this highest level of criticality, suggesting that intermediate stages often suffice for most individuals. Furthermore, they highlight the challenge of distinguishing genuine critical development from mere conformity to external expectations. This underlines the need for educators to be aware of the realities of the classroom environment and contextual factors. Educators should support students in navigating various levels of critical engagement and create conditions that foster authentic, internalised critical thinking, while being mindful of the complexities and developmental nuances involved.

The study suggests that "Learning to Argue," with its emphasis on foundational skills and structured frameworks, aligns with early criticality, where students are initially engaging with basic argumentative techniques. On the other hand, "Arguing to Learn," which focuses on deeper engagement and challenging existing assumptions, corresponds with guided and late criticality, representing more advanced stages of independent critical thinking (Figure 8.1). While these connections are supported by observed patterns in student essays and classroom interactions, they should be framed as hypotheses. It is crucial to recognise the limitations of these frameworks, acknowledge individual and contextual variability, and emphasise the need for further research to fully understand how argumentation facilitates criticality development, and vice versa, across different settings.

Figure 8.1 *Nature of criticality development through argumentation*



It should be noted that certain aspects of criticality explored in this study may not fully align with Johnston et al.'s (2011) framework for criticality development in the humanities and social sciences. While the framework provides a valuable lens for understanding the cognitive progression from early to late criticality and touches upon specific aspects of interpersonal and social dimensions, it may not fully capture the unique aspects of criticality as manifested through argumentation. For instance, the study highlights that argumentation in political science involves not just challenging existing norms but also strategically engaging with complex disciplinary knowledge, including power dynamics within socio-political contexts. This integrative aspect—where students must navigate intricate rhetorical strategies and diverse viewpoints—may extend beyond the cognitive stages outlined in Johnston et al.'s framework. Moreover, the role of appraisal resources, such as evaluative language and engagement with counterarguments, is crucial for constructing persuasive arguments within the academic discourse of political science. These elements could complicate a linear developmental model of criticality, suggesting that effective argumentation in this discipline involves a deeper engagement with both individual competencies and disciplinary norms. Thus, while Johnston et al.'s framework aligns with the foundational stages of criticality observed in political science,

the study reveals that aspects of disciplinary knowledge and argumentative practices may require an adaptation or extension of the framework to fully capture the complexities of criticality development in this context.

8.4.2 Implications for Developing Criticality through Argumentation in Disciplinary EAP and English Language Education at Tertiary Level

To effectively develop criticality and enhance argumentative writing in disciplinary EAP teaching practices, educators should adopt a stage-appropriate approach that aligns with the stages of early, guided, and late criticality. Early instruction should focus on building foundational skills, utilising structured frameworks like Toulmin's model to help students learn how to construct clear and coherent arguments. At this stage, students need guidance in applying basic argumentative techniques and understanding the importance of organising their ideas logically. As students progress to guided criticality, instruction should encourage them to engage more deeply with diverse perspectives and begin challenging established norms within structured frameworks. This phase involves fostering a more autonomous exploration where students critically assess foundational assumptions and integrate more complex ideas into their arguments. The curriculum should, therefore, be designed to balance structured approaches with opportunities for dialogical inquiry, allowing students to move from "Learning to Argue," where they focus on mastering argumentation techniques, to "Arguing to Learn," where they engage in critical dialogue and collaborative problem-solving.

Assessment practices must also be adapted to reflect this progression in criticality. Rather than merely evaluating the correctness of arguments, assessments should consider the depth of students' critical engagement, their ability to challenge assumptions, and their skill in integrating diverse perspectives. Feedback should be tailored to support students' movement from guided to late criticality, helping them refine their arguments and deepen their critical thinking. For instance, in the late criticality stage, students should be encouraged to independently reshape argumentative frameworks and critically evaluate the reliability and biases of their sources, reflecting a more sophisticated level of critical thinking. Additionally, empowering students by making them aware of these stages of criticality can help them take greater control of their learning. This awareness enables students to set specific goals for their development, seek out more complex challenges, and understand the trajectory of their critical thinking growth.

Moreover, adapting frameworks like Johnston et al.'s (2011) to the specific demands of disciplinary contexts is crucial. In disciplines like political science, for example, criticality development involves not only challenging norms but also strategically engaging with complex

disciplinary knowledge, including power dynamics within socio-political contexts. Therefore, teaching practices should integrate disciplinary knowledge and rhetorical strategies to capture the full complexity of criticality in these fields. This approach ensures that students are not only learning how to argue effectively but also developing the ability to think critically and independently about complex issues, thereby preparing them for the intellectual demands of their respective disciplines.

8.4.2.1 Fostering Criticality in EAP Classrooms in Thailand: Integrating Disciplinary Knowledge within English Language Learning and Teaching

The study's findings underscore the importance of integrating disciplinary knowledge with English for Academic Purposes (EAP) instruction to foster criticality effectively. In Thailand, where English-medium education (EME) often caters to the elite and emphasises language proficiency for global competitiveness, there is a pressing need to balance structural instruction with meaningful critical engagement. This balance is crucial for preparing students to navigate complex academic and professional landscapes.

First of all, EAP instruction tailored for specific disciplines in Thailand should significantly benefit from the integration of political science content into the curriculum. By incorporating discipline-specific material, EAP practitioners can bridge the gap between language proficiency and disciplinary knowledge, enhancing students' ability to engage with complex political issues effectively. This approach allows students to apply their language skills to real-world political discourse, fostering a deeper understanding of both linguistic structures and political contexts. For instance, including case studies, policy analyses, and historical political debates can help students practice constructing and critiquing arguments within a relevant context. This not only improves their linguistic knowledge related argumentative writing but also prepares them to analyse and contribute to political discussions, thereby developing a more nuanced and sophisticated grasp of political discourse.

To truly cultivate critical thinking, EAP instruction must extend beyond focusing solely on linguistic accuracy. It should emphasise contextual understanding and critical engagement with content. EAP practitioners can achieve this by designing activities that encourage students to analyse socio-political issues, challenge prevailing assumptions, and explore a range of viewpoints. For example, debates and case studies on contemporary political issues can prompt students to articulate and defend their positions while considering opposing perspectives. Collaborative projects that involve researching and presenting on political topics can further enhance students' ability to engage critically with complex arguments. Such methods not only enhance students' critical thinking skills but also prepare them to participate

meaningfully in political discussions and analyses, thereby integrating and connecting language proficiency with substantive knowledge.

Furthermore, addressing language proficiency barriers and leveraging digital learning environments are crucial for effective EAP instruction. Tailored strategies should be implemented to support students in overcoming language-related challenges while engaging deeply with political content. Scaffolded language support, such as targeted vocabulary exercises and grammar workshops, can help students build the necessary skills to participate in advanced discussions. Additionally, digital tools and online resources should be used strategically to support critical engagement rather than distract from it. EAP practitioners should select digital platforms and resources that facilitate collaborative learning and provide access to diverse viewpoints, enhancing students' ability to analyse and construct arguments in a digital age.

The success of EAP instruction can be greatly enhanced through close collaboration between EAP teachers and disciplinary educators, a strategy supported by content-based instruction (CBI) principles. While this approach may overlap with the principles of CLIL, it serves specific objectives tailored to disciplinary EAP, which focuses on equipping students with advanced academic language skills within fields such as political science. Disciplinary EAP addresses not only language mechanics but also argumentation and critical analysis relevant to the discipline. Drawing on CBI principles, EAP courses can integrate sustained, theme-based units that align with the discourse of political science. These units can target multiple skill areas—reading, writing, listening, and speaking—while deriving grammar, vocabulary, and lexico-grammatical patterns directly from the content, in line with Frodesen (2017). Additionally, the theme-based model, highlighted by Basturkmen (2010), has proven effective in higher education, particularly for multi-skills programs, and offers a valuable framework for designing disciplinary EAP materials.

Through collaboration with political science faculty, EAP instructors can incorporate discipline-specific argumentative strategies, rhetorical techniques, and content-driven tasks into their teaching. This ensures that language instruction supports critical thinking and analytical skills, enabling students to engage deeply and meaningfully with complex political issues. By bridging the gap between language instruction and disciplinary content, EAP instruction can provide a comprehensive educational experience that supports both linguistic development and the critical engagement required for academic and professional success.

In addition, incorporating a culturally sensitive approach in EAP instruction is essential for relevance and effectiveness, especially in Thailand. Curricula should be designed to acknowledge Thai cultural contexts and educational values while promoting critical thinking.

This involves using a balanced, more flexible approach to native and target languages to enhance comprehension and engagement with political texts. By considering students' cultural backgrounds and proficiency levels, EAP practitioners can create an inclusive learning environment that supports criticality development. For instance, using familiar cultural references and contextually relevant examples can make complex political concepts more accessible and engaging for students. This can foster a more profound understanding of both language and content while aligning new content with students' existing schemata, which can enhance their comprehension and engagement.

To support effective EAP instruction, professional development for both pre- and in-service teachers should focus on equipping educators with the skills needed to foster critical thinking and integrate disciplinary content into their teaching. This includes, for instance, training teachers to incorporate systemic functional linguistics (SFL) approaches and to use genre-based strategies effectively. Professional development programmes should also emphasise the importance of cultural awareness and instructional strategies that support various stages of criticality development. By enhancing teachers' ability to integrate disciplinary insights and structured argumentation techniques, professional development can improve instructional quality and better prepare students for complex academic and professional challenges in political science and beyond.

8.4.3 Recommendations for Future Research

The present study provides valuable and in-depth insights into criticality development within English for Academic Purposes (EAP) in the context of political science. However, there are areas for future exploration and improvements important for future research.

First, regarding the mode of instruction, this study was conducted in an online environment during the pandemic between 2020-2022, which presents unique implications for criticality development. To gain a more comprehensive understanding, future research should investigate the nature of criticality in face-to-face settings. Comparing these two modes of instruction could reveal how different learning environments impact students' engagement and development of criticality.

Second, the present study does not include students' voices due to insufficient number of voluntary participants, which are considered crucial for a holistic understanding of criticality development. Future research should incorporate student feedback and experiences to better understand their challenges, perceptions, and the effectiveness of critical thinking instruction from their viewpoint. This inclusion, when compared with teachers' perspective, can provide deeper insights into the educational processes and help refine teaching strategies.

Third, while this study focuses on political science, it highlights the need to explore criticality development across various disciplines particularly within the social sciences. Comparative studies across fields such as the humanities, social sciences, and natural sciences, for instance, can help map a comprehensive picture of criticality within higher education practice. Future studies can examine how integrating theoretical knowledge with practical applications can enhance critical thinking skills. Research could involve experimental designs to test various pedagogical strategies, such as case studies, debates, or problem-based learning, to determine their effectiveness in helping students apply theoretical concepts in real-world contexts. Understanding how different disciplines foster critical thinking can identify commonalities and unique strategies that contribute to a more disciplinary approach to teaching criticality in higher education.

In addition to exploring criticality across disciplines, it is crucial to investigate how critical discourse and evaluative language function in various academic contexts. Different fields may use distinct argumentation strategies and evaluative language patterns, which can influence instructional approaches. Understanding how appraisal and other interpersonal resources are utilised across disciplines will help tailor EAP instructional strategies to the specific needs of each subject. Future studies should examine how explicit instruction on evaluative language affects both written and spoken argumentation, focusing on how these elements contribute to constructing persuasive arguments and engaging critically with diverse viewpoints. This interdisciplinary approach will shed light on the commonalities and differences in criticality cultivation and provide valuable insights for enhancing educational practices across different fields.

Finally, the study emphasises the importance of collaboration between EAP and disciplinary educators. Future research should investigate the effectiveness of interdisciplinary teaching strategies in enhancing criticality. Studies could, for example, explore how collaborative efforts between language and content teachers in CLIL or different disciplinary EAP contexts impact student outcomes and provide evidence for best practices in curriculum design and instructional methods.

By addressing these areas, future research on criticality development should address the limitations of the current study and explore these potential pathways to enhance our understanding of effective instructional practices. By investigating criticality in face-to-face settings, incorporating student voices, exploring interdisciplinary comparisons, examining collaborative teaching strategies and the use of evaluative language, researchers can develop a more holistic understanding of how to foster critical thinking across various educational

contexts. These insights will ultimately contribute to the refinement of pedagogical approaches and the improvement of criticality development within higher education.

Appendix A Argumentative Structure and Final Examination Prompt in the EAP course

A) Argumentative Structure in the EAP for Political Science

Components of Argumentative Writing	Description
Introduction	An introduction gives the readers background information about a topic and draws their awareness to an issue.
Position statement	A position statement expresses your opinion or point of view about an issue. It introduces the topic in one sentence and clearly states a view, proposal, or policy regarding the issue.
Counterargument	When writing an argumentative essay, it is important not to forget to address the issue raised by those holding opposing views. It is not enough just to build a strong case for your side. By mentioning counterarguments, you can show the readers that you are aware of other's views and that you are not afraid to challenge the ones with which you disagree. It can also show that you are willing to look at both sides of an issue fairly and openly; you are willing to consider some points that do not agree with yours. When anticipating opposition, you can use one of the following transitions to introduce the counterargument if you want: <i>It can be argued that</i> <i>Opponents of this point may argue that</i> <i>An argument against this view is that</i> <i>Some may object / say that</i>
Refutation	After mentioning the counterargument, you must refute it to show that the opposing side may make some good points but that you feel the points on your side are better. You can refute the counterargument either by disproving it or by conceding a degree of validity, but showing that it is not as strong or valid as your arguments. Your refutation must do one of the following: (a) explain why the counterargument is incorrect: INCORRECT (b) deny that the counterargument is related to the topic: IRRELEVANT (c) compromise: although the counterargument is valid, it is not persuasive to overcome your argument: INSUFFICIENT You can use connectors like <i>however</i>, <i>nevertheless</i> to introduce your refutation. You can also combine the counterargument and the refutation by using <i>though</i>, <i>although</i>, or <i>even though</i>.
Pro argument	In argumentative writing, you generally assume that your reader does not support your point of view. Your goal, therefore, is to have your reader agree with your opinion by carefully building strong and convincing arguments while pointing out the weaknesses of opposing arguments.
Support	<u>1.1 Facts</u> A fact is a statement that is true and can be proven. It cannot be argued. <u>1.2 Statistics</u> A statistic is a collection of numerical information regarding a particular topic. <u>1.3 Examples</u> An example is a single item, fact or incident that represents a general topic or subject. <u>1.4 Support from Authority</u> You may also cite authorities as evidence to support your ideas. Authorities are people or organizations that are widely known as a result of their work in a particular field. For example, the World Bank could be a reliable source of authoritative information about aid to developing nations. <u>1.5 Logical Reasoning</u> Your support can be reasons which are logical and relevant to your argument. <u>1.6 Personal Experience</u> If you use personal experience in your argumentative writing, you should be careful that the experience is not unique to yourself. In other words, the incident you use to illustrate a point should be one that your readers either could have had themselves or could accept as reasonable proof. Personal experience is powerful evidence if your readers see that the experience could happen to them.
Conclusion	A conclusion summarizes the whole essay and may include a solution, a prediction, or a recommendation where appropriate. You may use the following expressions to start your conclusion: <i>in conclusion</i> , <i>to sum up</i> , <i>in short</i> , <i>clearly</i> .

B) Final Examination Prompt

Date and time	7 May 2022 (9.00 am.) – 8 May 2022 (9.00 am.) 24 hours
Mode	Online take-home examination
Task Description	You will be provided with a writing prompt on a controversial topic and required to write an argumentative essay of 500 words (maximum) in response to the given prompt. You will have to look for the sources on your own and use those sources to

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support your ideas/arguments. All the sources used in the essay must be properly acknowledged. The essay must consist of six paragraphs as follows.

- Paragraph 1: Introduction and position statement
- Paragraph 2: Counterargument and support
- Paragraph 3: Refutation and support
- Paragraph 4: Pro argument 1 and support
- Paragraph 5: Pro argument 2 and support
- Paragraph 6: Conclusion

For this take-home examination, please bear in mind the following.

- The word limit (500 words maximum) must be **STRICTLY** observed. The instructors scoring your writing will read and assess only the first 500 words of the essays and ignore all other words that go beyond this word limit.
 - Verbatim use of source materials is strongly discouraged. You must paraphrase the sources you use to compose your essays. Turnitin, a plagiarism-detecting software, will be used to spot instances of academic dishonesty.
 - It is your responsibility to submit your essay within the specified time. Late submissions will automatically result in a score of zero, and this score assignment is deemed final and not open to further negotiation.
-

Appendix B Interview Guide

FOR TEACHERS

Approx. time: 45 minutes – 1 hour

Introduction

- Greeting the participant and thanking for taking part in the research
- Briefly providing the basic information about the interview including all the main topics to be covered
- Informing them about the ethical practices, how the data will be used, confidentiality and anonymity, and the fact that they can withdraw from the interview at any time
- Asking them if they have any questions they wish to ask before the interview

Teaching Background

- What are the subjects you have taught?
- Could you tell me about the course(s) you are teaching?
 - What are the goals and objectives of the course?
 - What do you expect your students to be when they leave the course?
 - How would you compare the courses you are teaching (e.g., other EAP courses or political science content courses) What would you consider similar or different among these courses?
 - What do you see in teaching EAP/this content subject(s) to political science students? What skills should political scientists acquire?
 - Why are argumentative skills included in this course or are they part of the course?

Argumentation and teaching practice

For both groups:

- How would you define argumentation or argumentative writing? What are the key characteristics of this type of writing/language you expect your students to write?
- What constitutes a good/effective argumentative writing?
- What are the linguistic resources do you think necessary for the students of political science?
- To what extent would you consider argumentation skills in this course ‘generic’? And what would you consider as more “discipline-specific” features or skills for political science?
- Which aspects of argumentation do you think are more challenging to teach and learn? What you might consider easier? Why?
- Do you teach argumentation in your class? How? Apart from argumentative skills, how do you see the role of argumentation in your class?
- What is your opinion on the six-paragraph structure of argumentative writing that includes:
 - *Introduction and position statement*
 - *Counterargument and support*
 - *Refutation and support*
 - *Pro argument 1 and support*

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- *Pro argument 2 and support*
 - *Conclusion*
- How your students reacted or responded to the teaching and learning of argumentation?
- Have you used any additional/supplementary materials related to argumentative skills/argumentation in your class?
 - Could you give me some examples?
 - What are the purposes of these materials compared to the main/core materials?
 - How do you use these in your class?
 - How do your students respond to them?
- What linguistic tools that you think can help the students to develop argumentative skills/argumentation?
 - Why? Could you give me some examples?
- In what ways can your students be more successful in their argumentative skills? What would be your suggestions?

For EAP teachers:

- How do you see the relationship between spoken and written argumentation in this course? What are the expected learning outcomes between the two tasks? What do you think worked and not worked in these tasks?
- As part of the course contents, what is the role of paraphrasing and summarizing skills?
- For the argumentative essays, which elements/paragraphs do you think is easier and which is more challenging for students? Why?
- Could you comment on some of these (anonymised) selected students' argumentative writing? (*Certain examples on students' writings, particularly in counterargument and refutation, are provided to the teachers to comment on and compare with other pieces of writing that received different scores.*)
- What do you think about these 4 levels of discourse patterns and how it is applied to argumentative writing in the course?
- As an EAP teacher, how would you see the relationship between language (English) and content (political science)?
 - How do you juggle between the two?

For political science lecturers:

- (Present PolSci teachers the six-paragraph argumentation and/or assessment criteria) What do you think about this argumentative structure from a disciplinary perspective.
- Is argumentation part of the curriculum (e.g., university, department)? Is it stated explicitly or implied?
 - If yes, could you tell me in more detail how this is the case?
 - How is it defined in this context?
 - Your interpretations? Any implications?
 - If not, why do you think there is none?
 - What exactly are you looking for when teaching argumentation?
- How relevant is it for argumentation to the content of your course? (e.g., your practice in general, the course material, assessment)

Closing Questions

- Is there anything else you would like to add or comment?
- Thanking the participant again for taking their time to be part of the interview

Appendix C Participant Information Sheet

Study Title: Learning to argue and arguing to learn: A systemic functional linguistics approach to argumentation in the English for Academic Purposes classroom

Researcher: Mr Sirawit Apairach

ERGO number: 81696

You are being invited to take part in the above research study. To help you decide whether you would like to take part or not, it is important that you understand why the research is being done and what it will involve. Please read the information below carefully and ask questions if anything is not clear or you would like more information before you decide to take part in this research. You may like to discuss it with others but it is up to you to decide whether or not to take part. If you are happy to participate you will be asked to sign a consent form.

What is the research about?

The research project aims to investigate argumentative writing in the English for Academic Purposes (EAP) for Political Science classroom in L2 context. As a qualitative case study, the present study pursues the following research objectives:

- 1) To investigate into the genre and discourse patterns of argumentative writing and how metafunctions are utilised in these patterns through a systemic functional approach; to identify exemplary argumentative writing in EAP for Political Science
- 2) To understand learning opportunities arise for students to discuss issues and argue in class; to inquire into the discourse community of argumentative writing through an ethnographic approach; to investigate how and the extent to which classroom practice inform argumentative writing in this context
- 3) To investigate the perceptions of and conceptualisations behind argumentation from a teaching (EAP and political science teachers) and learning perspectives (EAP students); to identify agreements or mismatches among the teachers and the students

Why have I been asked to participate?

You have been asked to be part of the research because you are teaching OR studying an EAP for Political Science course or a content course in political science at a public university in Thailand.

What will happen to me if I take part?

You will take part in a semi-structured interview with the researcher via an online video-conferencing platform. The researcher will meet with you on the agreed date and time. The interview is expected to last approximately 45 minutes to one hour depending on the information and topics being interviewed.

The interview will be audio- or video-recorded on the online platform. This is for the purpose of reviewing and transcribing only. The researchers will at times use interview notes to write down some information during the interview. Any personal information in the recordings and the notes will NOT be used, and other data will be anonymised. The recordings will be used by the researcher and the supervisors only.

Are there any benefits in my taking part?

There may be no direct benefit in taking part in this project. However, your experience and expertise contribute to a better understanding of the teaching and learning of argumentative writing in the EAP for Political Science context.

Are there any risks involved?

There are virtually NO risks involved in taking part in the research. If you feel uncomfortable at any stage of the research, you can contact the researcher and/or withdraw from the research at any time.

What data will be collected?

Data collected from the interview includes your teaching/studying experience in general, your perceptions of argumentative writing related to your class, and your additional comments on the topic in question.

Will my participation be confidential?

Your participation and the information we collect about you during the course of the research will be kept strictly confidential.

Only members of the research team and responsible members of the University of Southampton may be given access to data about you for monitoring purposes and/or to carry out an audit of the study to ensure that the research is complying with applicable regulations. Individuals from regulatory authorities (people who check that we are carrying out the study correctly) may require access to your data. All of these people have a duty to keep your information, as a research participant, strictly confidential.

Access to all personal data will be password-protected, kept in encrypted folders, and will NOT be shared with any third parties. All the recordings will be retained throughout the duration of the research and will be deleted after the project has been completed. The personal data such as names will be anonymised by using codes (alphabets and numbers). Only the researcher and the supervisors will have access to the data.

Do I have to take part?

No, it is entirely up to you to decide whether or not to take part. If you decide you want to take part, you will need to sign a consent form to show you have agreed to take part and submit the form to the researcher via email: s.apairach@soton.ac.uk

What happens if I change my mind?

You have the right to change your mind and withdraw at any time without giving a reason and without your participant rights being affected.

If you would like to withdraw, please contact the researcher at: s.apairach@soton.ac.uk

What will happen to the results of the research?

Your personal details will remain strictly confidential. Research findings made available in any reports or publications will not include information that can directly identify you without your specific consent.

The result will be used by the researcher and the supervisors to review and understand more about argumentative writing, discourse patterns, and other relevant aspects in the EAP for Political Science classroom. Where necessary, the interview recordings will be transcribed and presented as research findings. The result will greatly contribute to a better understanding of argumentative discourse in L2 context and benefit the teaching and learning of argumentative writing in the EAP courses for political science.

Where can I get more information?

If you require more information, you can contact the researcher at: s.apairach@soton.ac.uk.

What happens if there is a problem?

If you have a concern about any aspect of this study, you should speak to the researchers (s.apairach@soton.ac.uk) who will do their best to answer your questions.

If you remain unhappy or have a complaint about any aspect of this study, please contact the University of Southampton Research Integrity and Governance Manager (023 8059 5058, rgoinfo@soton.ac.uk).

Contact information of the research team:

Mr Sirawit Apairach (s.apairach@soton.ac.uk)

Dr Karin Zotzmann (k.zotzmann@soton.ac.uk)

Data Protection Privacy Notice

The University of Southampton conducts research to the highest standards of research integrity. As a publicly-funded organisation, the University has to ensure that it is in the public interest when we use personally-identifiable information about people who have agreed to take part in research. This means that when you agree to take part in a research study, we will use information about you in the ways needed, and for the purposes specified, to conduct and complete the research project. Under data protection law, 'Personal data' means any information that relates to and is capable of identifying a living individual. The University's data protection policy governing the use of personal data by the

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University can be found on its website (<https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page>).

This Participant Information Sheet tells you what data will be collected for this project and whether this includes any personal data. Please ask the research team if you have any questions or are unclear what data is being collected about you.

Our privacy notice for research participants provides more information on how the University of Southampton collects and uses your personal data when you take part in one of our research projects and can be found at <http://www.southampton.ac.uk/assets/sharepoint/intranet/Is/Public/Research%20and%20Integrity%20Privacy%20Notice/Privacy%20Notice%20for%20Research%20Participants.pdf>

Any personal data we collect in this study will be used only for the purposes of carrying out our research and will be handled according to the University's policies in line with data protection law. If any personal data is used from which you can be identified directly, it will not be disclosed to anyone else without your consent unless the University of Southampton is required by law to disclose it.

Data protection law requires us to have a valid legal reason ('lawful basis') to process and use your Personal data. The lawful basis for processing personal information in this research study is for the performance of a task carried out in the public interest. Personal data collected for research will not be used for any other purpose.

For the purposes of data protection law, the University of Southampton is the 'Data Controller' for this study, which means that we are responsible for looking after your information and using it properly. The University of Southampton will keep identifiable information about you for 3 years after the study has finished after which time any link between you and your information will be removed.

To safeguard your rights, we will use the minimum personal data necessary to achieve our research study objectives. Your data protection rights – such as to access, change, or transfer such information – may be limited, however, in order for the research output to be reliable and accurate. The University will not do anything with your personal data that you would not reasonably expect.

If you have any questions about how your personal data is used, or wish to exercise any of your rights, please consult the University's data protection webpage (<https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page>) where you can make a request using our online form. If you need further assistance, please contact the University's Data Protection Officer (data.protection@soton.ac.uk).

Thank you.

On behalf of the research team, the researcher would like to thank you for taking your time to read the information and considering taking part in the research.

Appendix D Consent Form

CONSENT FORM

Study title: Learning to argue and arguing to learn: A systemic functional linguistics approach to argumentation in the English for Academic Purposes for Political Science classroom

Researcher name: Mr Sirawit Apairach

ERGO number: 81696

Please initial the box(es) if you agree with the statement(s):

I have read and understood the information sheet (<i>May 2023/version 01</i>) and have had the opportunity to ask questions about the study.	
I agree to take part in this research project and agree for my data to be used for the purpose of this study.	
I understand my participation is voluntary and I may withdraw at any time for any reason without my participation rights being affected.	
I understand that taking part in the study involves audio/video recordings which will be transcribed and then destroyed for the purposes set out in the participation information sheet.	
I understand that my personal information collected about me such as my name will NOT be shared beyond the study team.	

Name of participant (print name).....

Signature of participant.....

Date.....
.....

Name of researcher (print name) Mr Sirawit Apairach

Signature of researcherSirawit.....

Date.....

Appendix E Transcription System

Symbol	Interpretation
T	Teacher
S1: S2:	Identified students
{S1} {S2}	Mentioning of specific student' names
(3) (4)	Pausing for 3 or more seconds (the length given in seconds)
/hello/ /hi/	Overlapping utterances
=	Continuation
?	Rising intonation, question
xxx	Inaudible or unintelligible sections
CAPITAL LETTER	Emphasis, particular prominence
“text”	Mentioning or reading a text
[text]	English translation (bold)
(<u>text</u>)	Description of contextual events
@	Laugh
@text@	Utterances spoken laughingly

Appendix F Examples of Coding Categories for Interview Findings

Excerpt [Veena_International Relations]	Initial Coding
[00:01:15] นี่คือวิชาปีหนึ่ง เทอมหนึ่ง นะคะ มีวิชาชื่อว่า 'Logic, Reasoning and Social Inquiry' ในภาษาไทยคือตรรกะเหตุผลและการค้นคว้าทางสังคมศาสตร์นั่นเองค่ะ วันนี้เราไม่ได้สอนวิชานี้แล้วนะคะ ไม่ได้สอนแต่เคยสอนค่ะ แต่มันเน้นทั้งเรื่องของทักษะการค้นคว้าที่ใช้ห้องสมุดและฐานข้อมูลต่าง ๆ นอกจากนี้ยังเน้นให้เข้าใจการอ้างอิงที่ถูกต้อง เวลาที่ต้องเขียนงานส่งทางออนไลน์หรือมีลิงก์ให้อ่าน มีลักษณะคล้ายกับการพูดคุยกันในห้องค่ะ นั่นคือเป็นเรื่องที่เน้นความคิด เช่นการวิพากษ์ที่ส่งเสริมไปตั้งแต่เริ่มต้นค่ะ การเรียนการสอนในวิชานี้มีการแบ่งออกเป็นส่วนตัวต่าง ๆ ปกติแล้วจะมีส่วนทฤษฎีและปฏิบัติอย่างใหญ่ อย่างเงี้ย แต่มีการปรับปรุงทุกปีนะคะ ไม่คงเส้นคงวเหมือนกันทุกระยะเวลา นักศึกษาจะไปเรียนในชั้นย่อยตามภาคที่ตัวเองอยู่ในปีทีหนึ่ง ปกติในปีแรกจะไม่มีเรียนวิชาทั้งหมดเลย จะเริ่มเรียนวิชาที่เป็นของภาควิชาจริง ๆ ตอนปี 3 แต่ในปีแรกถ้ามีภาคใด ๆ ก็จะได้เรียนกับอาจารย์ที่อยู่ในภาคนั้น ๆ อย่างนี้ค่ะ เพื่อให้ให้นักศึกษาได้มีโอกาสที่จะได้รับการสอนและ readings แบบเฉพาะจากผู้สอนที่เชี่ยวชาญในสาขานั้น ๆ ทั้งยังมีตัวเลือกที่เกี่ยวข้องกับศาสตร์หลาย ๆ ด้านค่ะ This is the first year, first semester, and the course is called 'Logic, Reasoning and Social Inquiry,' which translates to logic, reasoning, and social research in Thai. We're not teaching this course today, but we used to teach it. The emphasis is on research skills, utilizing the library and various databases. Additionally, it focuses on understanding proper referencing. When it comes to submitting assignments online or providing links for reading, it's similar to discussing things. It's about fostering critical thinking from the beginning. In this course, teaching is divided into various parts. Normally, there are theory and practice components, often significant. However, it undergoes adjustments every year, and it's not consistently the same over time. Students attend sub-classes according to the semester they are in during the first year. Typically, in the first year, not all courses are taken. Actual subject courses start around the third semester. In the first year, students will study with professors from that department with specific readings. This ensures students have the opportunity to be taught by experts in that field. There are also options related to various aspects of science. This is an overview of this course.	Research Skills Development / Library and Database Utilisation Critical Thinking Emphasis Theory and Practice Components Course Adjustments Over Time Specialised Teaching by Department Professors
[00:20:58] ส่วนแรกเรียกว่าเป็น Emancipatory IR มันเป็นแนว (xxx) International Relations คือมันเป็น จุดประสงค์ร่วมกันของค่ายวิพากษ์อะไรเงี้ย ที่จะหาทางอารมณ์แบบ emancipate ก็คืออารมณ์แบบปลดแอกปลดโซ่ตรวนของของคนใน discipline ด้วย ของแบบ scholars ของของคนเรียนอะไรเงี้ยนะแล้วก็แบบทั้ง traditioners แล้วก็แบบคนจริง หมายถึงว่าคนทั่วไปอะที่เขาจะแบบ struggle อยู่อะไรเงี้ยเพื่อที่จะแบบออกจาก โครงสร้างที่ครอบงำของไออาร์มาแต่เดิมเพราะว่าเขาจะรู้สึกว่ามันเป็นการสร้างของพวกที่มีพริวิตอยู่แล้วคือเป็นโลกตะวันตก แล้วคนที่แบบตั้งคำถามก็จะเป็นพวกกลุ่มละตินอเมริกาอะไรประมาณเนี้ย ว่าอ้อมันจริง ๆ เป็นประวัติศาสตร์ของการ colonized อะไรเงี้ยแต่การ colonize นี่ก็ไม่ได้หมดไปตอนที่อยู่นอกว่าเออแบบเออทุกคนเป็นสมาชิกยูเอ็นได้รับเอกราชแล้วอะไรอย่างเงี้ย มันก็มาอย่าง ในรูปแบบของ discipline คือของแบบสาขาวิชานี้ในการจัด structure อะไรต่าง ๆ อะไรสำคัญสุด The first part is called Emancipatory IR. It is a perspective within (xxx) International Relations. It is a common goal of critical perspectives to seek emancipation. Emancipation is an attitude that aims to liberate and break the chains and shackles of individuals in the discipline. This includes scholars, students, traditioners, and ordinary people who may be struggling to break free from the traditional framework. They feel that it is a creation of one who already have privilege, representing the	Emancipatory Perspective in IR Critique of Traditional Frameworks Challenges to Western-Centric Views

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Western world. People who raise these questions may belong to groups like Latin Americans, who believe it is, in fact, the history of colonization. However, colonization did not end when they declared independence; it continues in various forms. This perspective challenges the structures and importance imposed by the discipline, considering it in the context of being a member of the United Nations, having gained sovereignty. It questions what is essential or prioritised in the discipline's various structures.	Ongoing Colonial Structures Questioning Established Structures
[00:29:32] Inquire หมายถึงว่า inquiring ได้มากขึ้นอะไรเขาก็จะไม่ค่อยยอมรับ narrative เพียงเพราะมัน popular หรือว่ามันเป็นสิ่งที่แบบคนเชื่ออยู่แล้วอะไรอย่างเงี้ยเพราะว่าอย่าง week ที่เป็น feminism ซึ่งมันจะมีนัก feminist ที่แบบค่อนข้างดังมากคนหนึ่งเนี่ย เขาก็จะบอกว่า ชูต้อง question คอมมอนเซนส์อะไรแบบเนี้ยซึ่งก็คือมันจะต้องทำอย่างนี้ต่อไปแบบไม่หยุดยั้ง ซึ่งจริงๆไม่เท่านั้นก็อาจจะแบบสบายเพราะไม่ต้องทำอะไรหรอกเพราะว่าก็คือคือ bear in mind ว่าอาจจะต้องมีการคิดอะไรแบบเนี้ยเนี่ย แบบใน week เนี่ยเขาก็จะบอกว่าเออเนี้ยมันก็ดูแบบว่าลึกลับๆ ผู้หญิงก้าวหน้าใช้แบบ feminist เวลาไปขึ้นเวทีแบบเหมือนเวทีการประชุมระหว่างประเทศหรือว่าเนี่ยแต่เวทีที่เป็นแนวแบบคุยกันวิวิชาการนะคะ วงวิชาการ IR มันก็ต้องมี panel มันก็ต้องให้ผู้หญิงที่เป็น speaker หรือว่า panel ที่คุยเรื่อง feminism หรือ feminist IR มั้ยอะไรแบบเนี้ยเขาก็จะบอกว่าแบบนี้ต้องมองลึกกว่านั้นนะ คือหมายความว่าแค่ให้ผู้หญิงหรือว่าก็ก็ต้องมาเลือกแล้วเมื่อไหร่จะ include เข้ามาเช่น เอาเข้า panel แล้วก็ underrepresent ก็คือมันไม่ค่อยมีผู้หญิงเลยไม่ค่อย add ผู้หญิงเข้ามาที่หลังมันก็ไม่ใช่ว่าหลายๆครั้งทำแบบนี้ มันก็มีสถิติออกมาเหมือนกันว่าเอออาจารย์ที่เป็นผู้หญิงนักวิชาการที่เป็นผู้หญิงเนี่ยได้รับโอกาสในการถูกเชิญไปพูดบ่อยกว่า อันนี้สถิติอเมริกันนะ แต่เขาบอกว่าอาจจะแบบคล้ายคลึงกันทั่วโลกอะไรเงี้ยมันก็เลยเหมือนคล้ายกับมี space ให้น้อยกว่าคือคิดเป็น after-thought อารมณ์แบบผู้หญิงไม่พอเพิ่มดีกว่าอะไรเงี้ย แต่ว่าเขาก็ไม่เชิงว่าเค้าจะ จะได้รับพื้นที่คือการที่แบบต้องคิดว่าเขาต้องมีที่อะ มันก็คล้ายๆกับว่าชูต้องพยายาม locate ตลอดว่าไอ้ผู้หญิงต้องอยู่ critical camp ผู้หญิงอยู่ตรงนี้ดีกว่าอะไรแบบเนี้ยซึ่งอันนี้มันก็อาจจะต้องลองมองลึกลงไปกว่าการที่แบบโอเคให้โควตาหรือแบบมีสไลเดอร์ที่เป็นผู้หญิงมากขึ้นอย่างเงี้ยค่ว่าจริงๆแบบเออโครงสร้างมันเปลี่ยนไหมอะไรอย่างเงี้ยมันไม่ใช่แค่ดูว่าเออมีจำนวนมากขึ้นเฉยๆ ก็หวังว่าเออมันไม่มีสเกลแบบวิชาชีพนะที่บอก รัฐศาสตร์ทั้งหมดก็ไม่ได้อาชีพก็คือมันอาจจะเป็นสเกลในการแบบเอ้ออ่านแบบแล้วก็พยายาม broaden horizons นี่มันกว้างไกลยิ่งขึ้นอย่างเงี้ยค่ะ The term "inquire" means that as people become more inclined to inquire, they may not readily accept a narrative simply because it is popular or something that people already believe. For example, during a week focused on feminism, where there are prominent feminist figures, they emphasize the need to question common senses. This implies that students must continue to do so persistently. While not doing it may seem comfortable because they don't have to do it all the time, it is crucial to bear in mind that there might be a need for such thinking, as in the mentioned week. In the field of International Relations (IR), some feminist scholars argue that it is essential to have panels that include women as speakers or participants discussing feminism or feminist IR. However, the text says that it's necessary to go beyond just including women in panels and avoiding underrepresentation. Simply including women isn't what matters here. In fact, there is statistics from the United States, suggesting that female academics and scholars, especially those in IR, have fewer opportunities to be invited to speak. This might also be a global phenomenon, indicating that there is less space given to women. But it's more like an afterthought just for the sake of having female speakers. It's like you have to try to locate all the time that oh women need to be in the critical camp or here is better. Things like that. There is the need to think beyond mere representation or quotas, but scrutinise any structural changes that may occur. I hope that.. There is no professional skills like I said. All in political science is not on the professional side alone. They are like reading skills that broaden horizons further. Something like that.	Informed base for critical thinking Questioning Common Sense Need for persistent critical thinking Importance of feminist representation in IR Challenges in Assessing Critical Thinking Critical Engagement with Texts Analysing and Justifying Opinions Scrutinising structural changes Role of Reading in Critical Thinking

Appendix F

[0:47:16] อันนี้ไม่ได้ว่าคนที่เหมือนว่าฉันไม่ได้ได้รับการ formal education แล้วจะไม่มี critical thinking คือไม่เกี่ยว แต่ว่าอันนี้คือหมายความว่าความคาดหวังที่เราในตอนนี้นี่แหละที่ว่าแบบถันเกิด เพราะบางทีเวลาถ้าไม่อ่านเนี่ย สิ่งที่เขาพูดมันก็ไม่รอบด้าน หนึ่ง แต่ว่าคือมันก็ได้ ไม่มีฐานมาจากแบบ อะไรเลยมันก็เป็นแบบ personal opinion เลยอะไม่ใช่แบบ critical thinking อะไรเงี้ย จะรู้สึกว่าเป็นแบบเอาแต่ใจเกิดเขามีแบบอย่างบางคนที่อาจจะไม่มี formal education ก็อาจจะไม่มี experiences จริงๆแบบทำงานหรือว่าอื่นๆการ struggle อะไรแบบเนี่ย ก็แน่นอนว่าเขาพัฒนาจากตรงนั้น ได้เงี้ย นิสิตบางคนก็อาจจะแบบ อายุยังน้อยแล้วก็ประสบการณ์ชีวิตไม่เยอะก็อยากจะให้แบบอ่านเยอะๆ แล้วก็แบบ keep up กับสถานการณ์ปัจจุบันอะไรเงี้ยต่างๆที่สำคัญ ในขณะเราเราไม่ค่อยอะไรขนาดนั้นเพราะว่านิสิตก็จะไว้พอสมควรไม่ว่าจะเป็นเรื่องแบบมีอบ เรื่องสงคราม แบบรัสเซีย ยูเครนเรื่องอะไรต่างๆในโลกนี้อะไรเงี้ย ส่วนใหญ่จะสนใจประมาณหนึ่ง แต่ว่า บางคณะอาจจะรู้สึกว่า มันไม่เกี่ยวกับวิชาที่เขาเรียน คือรัฐศาสตร์แล้วมันเกี่ยวมันโยงอยู่แล้วบางทีอาจารย์ก็ชวนคุยขึ้นมาแบบคือมันเกี่ยวกับวิชาที่เรียน เพราะมันไม่ยาก แต่นี่ก็ห่วงเพื่อไปถึงแบบคณะเออที่วิชาวิชาที่เขาเรียนปกติมันอาจจะไม่ค่อยแบบโยงกับแบบยังงี้คือปรากฏการณ์ในโลกนี้น่ามาก อะไรอย่างเงี้ยค่ะ This doesn't imply that people who, for instance, haven't received formal education won't have critical thinking. That's not the case. However, this indicates our current expectations. These things we expect, like if it happens—sometimes, when they speak without reading, it lacks depth, and it's not well-rounded. It's more like a personal opinion without a foundation; it's not critical thinking. We might feel that if they have experiences, perhaps from work or other struggles, they may indeed develop from there. Some students, even at a young age, with limited life experiences, might want to read more and keep up with current situations and significant issues. In our faculty, we don't encounter many issues because students are usually kept informed about important global matters, such as protests, wars, Russia-Ukraine crisis, and other important events. Most of them are quite interested in these issues. However, some faculties might feel that it's not related to what they study. For political science, some professors might engage in discussions related to the subject they teach, as it may not be difficult. But there is concern about faculties where the subjects they study don't seem to relate to the issues prevalent in the world, and it may not be easy to determine how to address this concern.	Impact of formal Education Expectations of CT CT vs. personal opinion Life experience vs. CT Importance of staying informed Engagement with global issues Disciplinary differences in critical engagement Challenges in non-related disciplines
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Note: In the sample excerpts provided, different colours are used to distinguish between various quotes and coded segments within a single excerpt. Please note that the same colour does not necessarily indicate the same quote or code across different excerpts. The colours are purely for visual differentiation and do not imply any thematic or categorical connection between the highlighted segments.

Appendix G Examples of Coding Categories for Observational Findings

Main themes	Sub-themes 1 (Coding categories 1)	Code description	Code example to be used
1. Crafting Critical Arguments: The Interplay between Argumentative Structure, Critical Expression, and Evaluation	1.1 Clarification of argumentative structure elements	The teacher ensures that students understand the various elements of the argumentative structure and acknowledges the potential for confusion in differentiating these elements.	
	1.2 Developing ideas into paragraphs	The teacher engages students in a discussion about planning for an argumentative essay, specifically focusing on the role of supporting sentences in expanding a single point into an elaborated paragraph.	Excerpt 1.4 was taken from week 10 which was the first week that the teacher introduced argumentative writing to student in Unit 3: Controversial Issues. (Excerpt 1.2) T: So the topic sentence will become an introduction, right? And then you also have to have the position statement. Yeah. What about supporting sentence? Yeah, what will it become? S4: Like to tell more details? T: You need more details, yes, of course. And then you will have to make it into an? Paragraph. Yeah. So instead of writing things in like in just one one sentence or two sentences. Yeah? For the argumentative essay structure , you will need one paragraph for each supporting evidence . You see that? Yeah, {S4}? S4: Yes.
	1.3 Emphasis on conciseness in writing	The teacher advises students that a 500-word argumentative essay is not lengthy, emphasizing the need for conciseness in their writing.	
	1.4 Emphasis on planning and strategic thinking	The teacher consistently emphasizes the planning stage of the argumentative essay, highlighting the importance of planning ahead, choosing and researching topics, deciding on the significance of information, selecting reliable sources, and paying particular attention to counterarguments and refutation. The analogy of layers of a hamburger is used to suggest that introduction and	(Excerpt 1.8) T: Yeah. So, you know, easy first of all, decide on the topic and then the next stage is gonna be time consuming. This is a stage that you probably is going to be doing for the our discussion or you know the (xxx) A very important kind of indicator of whether your paper is a good paper or a bad paper . Yeah. And so, you know, it's worth spending a little bit more time on , you know, counterarguments . Yeah. And refutations . That's my suggestion. (Excerpt 1.9)

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		conclusion may come later, reinforcing the importance of strategic thinking in the planning process.	T: ... It can be either, like from from less important one to more important one or can it can be the other way around, right? So it depends on you. And then then the last one, you might not think that this is the case, but the last thing that you should do is to write your introduction and conclusion. That's the last one. Yeah. And so get the meat first and then the buns , it's easier.
	1.5 Flexible approach to argumentative structure	These teacher's turns reveal a flexible approach to the six components of argumentation used in the class. This occurred at the beginning of the class on week 14, towards the end of the course, and closer to the final exam essay. The teacher acknowledges wider options for students to structure their argumentative essays and emphasizes the fundamental nature of what they were practicing in class, indicating a dynamic aspect of the argumentative genre that can be adapted beyond the EAP course.	(Excerpt 1.14) T: This is the outline that you will be using, yeah, for the final exam, yeah. I, I know that it seems a little bit restrictive , but trust me that this is a very good start . Yeah. For you at this point in the future. Yeah. Once you have mastered this outline here, you will be able to do a little bit more freestyle . Yeah. When it comes to kind of like writing an actual essay, if you are to become, you know, a news reporter or like, you know, you know work that involve like writing an argumentative essay. Now you can be a little bit more creative with your style , with your, you know, structure. But at this point as we're just practicing, as we're learning how the this is the basic , this is the fundamental . Like, you know, 101. Yeah, of like argumentative writing. And so this is where we're going to be starting from.
	1.6 Explanation of plagiarism and scoring	The teacher explains how plagiarism scoring works, emphasizing the importance of keeping the percentage at a maximum of 20% on Turn-It-In. The consequence is mentioned that the essay score would be zero if the plagiarism threshold is exceeded.	
	1.7 Scoring component overview	The teacher briefly mentions the scoring components, including reference, cohesion, and coherence, applied to all six paragraphs of the argumentative essays. Two points per paragraph are assigned, totaling 12 points in raw score.	
	1.8 Rubric importance and final score calculation	The teacher emphasizes the importance of studying the rubric and understanding its components thoroughly. The students would receive a total raw score of 50 in their essays, which would then be divided by 2, resulting in their final score, constituting 25% of the total course assessment.	

Appendix H Examples of Toulmin and Appraisal

Analyses of Students' Argumentative Essays

HIGH SCORE GROUP

Code: [Essay01_H] (22.5/25)

Sex education currently has been taught in primary schools. Not only teaching about sex but the curriculum is also designed to help children develop their safety, and confidence and also strengthen their self-esteem. Perhaps, the curriculum is still teaching only specific sexual acts such as male and female, so students may not receive enough awareness about gender diversity, and gender identities, including same-sex relationships. Therefore, primary school students should be taught about same-sex relationships. an

Some may argue that teaching children about same-sex relationships is age-inappropriate. According to the statutory guidance of Relationships Education, Relationships and Sex Education (RSE), and Health Education, This topic should be taught at a timely point to children. Some of the children could be confused by the content they've learned, for example, teaching those complex concepts of homosexuality might get children questions about their love's towards their friends. This stipulated that same-sex relationship content is still complicated for primary school students to understand.

However, there isn't too early for primary school students to learn about same-sex relationships. School can be the appropriate place that children can learn and develop their knowledge about their body and gender identities because school can design the curriculum suitable for students. Many countries started teaching new sex education about same-sex relationships in primary school according to government guidance such as primary schools in England and Ireland. Therefore, same-sex relationship education helps children understand and respect all gender orientation and also benefit LGBT groups.

In addition, studying same-sex relationships since primary school is important and more effective. According to the research of Socialization of Gender Stereotypes Related to Attributes and Professions Among Young Spanish School-Aged Children, The primary school ages are a vital time for developing gender equality awareness and self-esteem. Therefore, Teaching sex education to school-age children will help them to understand gender diversity and raise their awareness of gender equality. Moreover, it would be easier to encourage them to explore their gender and sexuality.

Moreover, teaching about same-sex relationships also helps children from same-sex parents raised. In other words, They will be able to comfortably speak about their family to their more open-minded friends. About Stonewall, the largest LGBT rights organization in Europe, they've come up with the 'Different Families, Same Love' concept which is easier for understanding to introduce children to diverse families and is currently widespread in English primary school. Primary age children become more understanding of same-sex relationships. This indicates that new sex education has been successful in primary school.

In conclusion, I totally agree with the statement "Primary school students should be taught about same sex relationships". Teaching about same-sex relationships to primary school students isn't brainwashing. Primary schools should provide their student's sex education, especially about homosexuality and gender identities, so children can be more understanding of gender equality and gender diversity. Raising awareness of equality in society from a young age will help people understand the diversity of society and have more empathy towards others, which is the key to happiness in our life.

(500 words)

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Argument quality (Toulmin): Claim: The main proposition or stance is clear: "Primary school students should be taught about same-sex relationships." Data: The evidence provided includes the idea that the current sex education curriculum is limited to specific sexual acts, potentially leaving out important aspects such as gender diversity and same-sex relationships. Reference to statutory guidance and government practices in England and Ireland that support teaching same-sex relationships in primary schools. Citing research on the socialization of gender stereotypes among young school-aged children to emphasize the importance of early education on gender equality. Warrant: The underlying assumption is that early education on same-sex relationships contributes to children's understanding of gender diversity, promotes gender equality, and encourages exploration of gender and sexuality. Backing: The essay supports the warrant by referencing specific programs and concepts like "Different Families, Same Love" introduced by Stonewall. This indicates that there are initiatives that have been successful in introducing same-sex relationships to primary school children. Qualifier: The degree of certainty applied to the claim is not explicitly stated. However, the essay acknowledges potential objections by mentioning that some may argue that teaching same-sex relationships is age-inappropriate. The qualifier is implicitly present in the discussion of the appropriateness of the content for primary school students. Rebuttal: The essay addresses potential counterarguments by acknowledging concerns about age-appropriateness and complexity. It argues that primary school is not too early for such education and that schools can design the curriculum appropriately.	Appraisal analysis: Counterargument: Engagement: Monogloss: The counterargument effectively engages with a singular viewpoint, acknowledging concerns about the age-appropriateness of teaching same-sex relationships in primary schools. For instance, the phrase "Some may argue" indicates an acknowledgment of opposing views. Heterogloss: The reference to statutory guidance introduces heteroglossic elements by incorporating external voices, adding authority to the argument. The mention of "statutory guidance of Relationships Education, Relationships and Sex Education (RSE), and Health Education" exemplifies this. Attitudes: Affect: Emotional reactions are not explicitly expressed in the counterargument. However, the mention of potential confusion in children implies a concern for their emotional well-being. The phrase "Some of the children could be confused" hints at this concern. Appreciation: The counterargument appreciates the need for a timely approach to teaching same-sex relationships, emphasising the complexity of the content for primary school students. The phrase "This stipulated that same-sex relationship content is still complicated" reflects this appreciation. Judgement: The counterargument lacks explicit judgement, as it does not overtly endorse or criticise the opposing viewpoint. There is no explicit use of judgmental terms. Graduation: Force: The counterargument does not employ intensified lexis, contributing to a more neutral presentation of the age-appropriateness concern. There is no explicit use of intensified language. Focus: The focus is adjusted by presenting schools as an appropriate place for learning about body and gender identities. The appeal to government guidance serves to maintain a well-balanced focus on the importance of same-sex relationship education. The phrase "School can be the appropriate place" exemplifies this. Refutation: Engagement: Monogloss: The refutation maintains a singular viewpoint, asserting that it is not too early for primary school students to learn about same-sex relationships. Key phrases like "there isn't too early" establish a clear stance. Heterogloss: External voices are introduced through references to government guidance and the practices of primary schools in England and Ireland, enriching the refutation with authoritative perspectives. For example, "according to government guidance such as primary schools in England and Ireland" incorporates external authority. Attitudes: Affect: Emotional reactions are not explicitly expressed in the refutation. However, the emphasis on the appropriateness of school settings implies a positive stance. Phrases like "appropriate place" suggest a positive attitude. Appreciation: The refutation appreciates the role of schools in providing suitable curriculum and highlights global practices, endorsing the positive outcomes of same-sex relationship education. The phrase "same-sex relationship education helps children understand and respect all gender orientation and also benefit LGBT groups" expresses this appreciation. Judgement: The refutation implicitly endorses the positive outcomes by emphasizing the benefits for understanding and respecting gender orientation and supporting LGBT groups. Phrases like "same-sex relationship education helps" imply a positive judgment. Graduation:
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	Force: Intensification is employed in the refutation, stating that it is not too early for primary school students to learn about same-sex relationships. Phrases like "isn't too early" contribute to a forceful argument. The use of phrases like "according to government guidance" strengthens the argument. Focus: The refutation maintains a well-balanced focus on the importance of same-sex relationship education, particularly within the context of schools and government guidance. The phrase "according to government guidance" serves to direct attention and maintain focus.
Overall Impression: Essay 1 presents a compelling argument advocating for the inclusion of same-sex relationships in primary school education. It begins with a clear assertion that primary students should learn about these relationships, supported by evidence highlighting deficiencies in current sex education curricula and referencing programs like "Different Families, Same Love" to emphasize the importance of early exposure to diverse family structures. The essay acknowledges potential objections, particularly concerns about the appropriateness of introducing such topics at a young age, and counters these arguments by stressing the educational and societal benefits of fostering early understanding of gender diversity. Examining Essay 1 through the Toulmin framework reveals a structured approach to argumentation. The claim is explicit and well-supported by evidence, aligning with Toulmin's emphasis on identifying claims and supporting evidence. However, the analysis primarily focuses on these basic components and does not delve deeply into warrants, qualifiers, or rebuttals as rigorously as the Toulmin model might require. This suggests that while the essay meets the structured essay criteria taught—introduction, counterargument, refutation, pro arguments with support, and conclusion—it may not fully engage with the nuanced reasoning and critical evaluation inherent in Toulmin's framework. Moreover, the essay's alignment with the structured essay components is reflected in the assessment criteria that emphasize content comprehensiveness, language accuracy, cohesion, coherence, and reference acknowledgment. These criteria are pivotal in evaluating essays within academic contexts but may prioritize surface-level adherence to structure over deeper critical analysis. Thus, while Essay 1 demonstrates proficiency in constructing a coherent argument within the taught framework, the Toulmin analysis highlights potential areas where deeper critical engagement and argumentative rigor could enhance its overall effectiveness. In conclusion, while Essay 1 achieves a high score based on its adherence to structured essay components and assessment criteria, the Toulmin analysis reveals opportunities for fostering deeper critical thinking and argumentative complexity. Integrating these insights can enrich pedagogical approaches aimed at nurturing comprehensive argumentative skills that balance structured coherence with analytical depth in academic writing contexts. This dual perspective underscores the importance of both structured frameworks and critical analysis in developing students' proficiency in argumentation and academic writing.	Essay 1 adeptly navigates the complexities of teaching same-sex relationships in primary schools, showcasing a nuanced understanding of counterarguments and refutations. It engages effectively with a singular viewpoint, incorporating authoritative voices through statutory guidance. While lacking explicit emotional expressions, it subtly implies concern for children's understanding. The refutation emphasizes the appropriateness of primary schools for teaching same-sex relationships, leveraging government guidance. Forceful language is used to assert the timeliness of such education. The essay maintains a well-balanced focus, successfully highlighting the importance of understanding body and gender identities in a school setting.

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