

Navigating TEFL Graduate Students Challenges and Strategies in Utilizing Critical Thinking Skills in Thesis Writing

Original Article

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Abstract

Thesis writing is a difficult procedure that requires critical thinking skills. Thus, one of the challenges that many students face while writing a thesis is the development of critical thinking skills during the writing process. The purpose of this study is to investigate the challenges and strategies that graduate students at Universitas Jambi face while trying to develop their critical thinking skills when writing theses. The researchers used case study method since the issue that were analyzing at was one particular case at Universitas Jambi's Master of English Education. To acquire the data, the researcher used interviews methods. The findings revealed that there were several challenges faced by the students in utilizing critical thinking when writing thesis. Those challenges include personal competence, linguistic, and psychological factors. In addition, the students employ some strategies to cope with the challenges arised in applying critical thinking skills when writing thesis. It includes time-management, technological support, reading and sources evaluation, and support system.

Keywords: Critical Thinking Skills, EFL Graduate Students, Strategies, Student Challenges, Thesis Writing.

1. Introduction

In higher education, students acquire many skills according to their major, however, critical thinking skills are arguably the most important. According to Lismaya (2019), critical thinking is a cognitive process of conceptualizing, applying, synthesizing, and evaluating information obtained from observation, experience, reflection, thought, and communication as a basis for belief and action. Moreover, universities foster students' development of critical thinking. This is supported by Bali (2015), whose research showed that higher education institutions play a significant role in developing students' critical thinking skills through various pedagogical approaches and curriculum designs. Additionally, critical thinking helps students develop a questioning mindset, which is essential for academic inquiry and intellectual growth (Duron et al., 2006). Therefore, critical thinking plays a significant role in higher education because it is needed to develop students' mindsets and intellectual growth.

Besides the importance of critical thinking in higher education, universities develop students' critical thinking often associated with academic writing. Academic writing is the ability to process the argumentation in the form essay, journal article, or thesis. This is in line with Vyncke (2012), who states that when critical thinking is applied to academic writing, the abilities are expressed through the argumentation process, resulting in an argumentation, namely the essay, and the thesis or dissertation. Academic writing requires rigorous analysis, logical argumentation, and the synthesis of complex ideas. It means that academic writing



involves questioning assumptions, evaluating evidence, and constructing coherent arguments. So, the students can develop nuanced perspectives and contribute original thoughts to their writing.

Although academic writing has many forms, a thesis is one of them and it is a crucial writing paper for students, especially graduate students. Writing a thesis requires a high level of critical thinking as it involves conducting in-depth research, synthesizing information, and presenting original ideas. It requires students to critically evaluate existing literature, identify research gaps, and develop a clear research question or hypothesis. According to Hyland (2013), “critical thinking is essential in academic writing as it enables students to engage with and contribute to scholarly conversations”. Additionally, it is essential for analyzing data, interpreting results, and drawing valid conclusions. Moreover, the argument presented in the thesis must be cohesive and coherent. In line with Paltridge (2002), he emphasizes that “thesis writing is a complex process that demands students to integrate various academic skills and knowledge to produce a cohesive and comprehensive argument”. Thus, writing a thesis is a complex process that require endeavor effort and critical thinking skills.

Writing a thesis is not easy because it is a complex process that requires critical thinking skills. Thus, many students face challenges in writing a thesis, one of which is developing critical thinking during the writing process. In line with Egege & Kutieleh (2015) findings, participants experienced difficulties in expressing their critical thinking in academic writing, such as a lack of argumentation, clarity, and criticality, as well as being overly descriptive. Furthermore, Samanhudi & Linse (2019) also stated that their research found four important factors that cause problems in the manifestation of students' critical thinking in their writing: lack of clarity of ideas, lack of critical analysis, lack of critical evaluation, and lack of precision. Additionally, these challenges can lead to a lack of coherence and logical flow in the thesis, making it difficult for readers to follow the argument. As a result, students often struggle to present a well-structured thesis.

Based on the challenges addressed earlier, there is a research gap in understanding the challenges and strategies for developing and applying critical thinking skills in writing a thesis. More research is needed to explore these challenges and strategies, particularly in higher education, especially in Indonesia. The literature addressing these issues is sparse, though a few studies have been conducted. For instance, Wijayati & Lestari (2021) assessed students' critical thinking when writing theses, and Thabran et al. (2022) examined critical thinking skills in an undergraduate writing course at Universitas Jambi. Given this gap in the literature, the researchers intend to conduct a study with a similar focus. Therefore, the aims of this paper are to explore graduate students' challenges and strategies for developing critical thinking in writing theses at Universitas Jambi. This research provided valuable insights into the specific difficulties faced by students and the strategies they employ to overcome them. The problems of the study can be formulated as what challenges EFL graduate students face in utilizing critical thinking skills when writing a thesis and how they overcome these challenges.

2. Literature Review

2.1. Critical Thinking

There are many definitions of critical thinking proposed by various scholars. Critical thinking is also known as a higher-order thinking skill in a university context (Giselsson, 2020). However, this definition is not in line with Fisher & Scriven (1997) definition, they define critical thinking as skilled and active interpretation and evaluation of observations and communications, information, and argumentation. Additionally, Lismaya (2019) defines

critical thinking as a cognitive process of conceptualizing, applying, synthesizing, and evaluating information obtained from observation, experience, reflection, thought, and communication as a basis for belief and action. Therefore, critical thinking is the ability to ability to process, conceptualize, apply, analyze, synthesize, and evaluate information.

While there are many definitions of critical thinking, there are theories in critical thinking. These theories are proposed by various scholars; however, the researchers chose the theories that are proposed by Paul & Elder (2006) and Ennis (1996). Paul & Elder (2006) theories are chosen because they focus on strategizing to enhance critical thinking. Furthermore, the theories are used to foster one's critical thinking through the thinking process. On the other hand, Ennis (1996) critical thinking theories emphasize its use as a tool for evaluating using critical thinking.

2.2. Ennis Critical Thinking Skills

Ennis (1996) define critical thinking as “reasonable reflective thinking focused on deciding what to believe or do.” This definition emphasizes that critical thinking is both a process and a goal, involving careful consideration of information and arguments in order to make a decision. In academic writing, this theory encourages students to approach their arguments with a systematic mindset, ensuring that each point is backed by solid evidence and logical reasoning. Ennis's focus on the need for clarity and precision in thought reflects the demand for academic writers to be not only persuasive but also coherent and methodical in presenting their ideas. Furthermore, Ennis highlight the importance of developing disposition and skills of the critical thinking. Ennis (1996) proposed set of critical thinking skills, it enabled individuals to analyze information, make reasoned decisions, and evaluate arguments.

There are five critical thinking skills, namely analyzing arguments, making inferences, evaluating evidence, recognizing assumptions, and deducing and inducing. Analyzing arguments refers to breaking down arguments into their component parts to assess validity. Inferences involve drawing logical conclusions based on available evidence. Evaluating evidence focuses on assessing the quality and relevance of information used to support an argument. Recognizing assumptions entails identifying and questioning underlying assumptions that may influence reasoning. Finally, deducing and inducing involve two types of reasoning: inductive reasoning, which derives general principles from specific observations, and deductive reasoning, which draws specific conclusions based on general premises or principles.

2.3. Critical Thinking Skills and Academic Writing

Critical thinking in academic writing is expressed through argumentation in essays, theses, journals, and reports. Argumentation is vital in academic writing because it represents the writer's original thoughts and showcases their critical thinking skills. So, students are required to present arguments in their academic work to demonstrate their analytical abilities. Andrews (1995) and Scott (2000) suggest that argumentation is a key manifestation of critical thinking. Andrews (1995) further explains that an argumentation results from engaging with diverse perspectives, evaluating sources, and incorporating compelling evidence to support the author's claims. Thus, argumentation involves not only confronting differing viewpoints but also confirming or reconciling them. In line with Loo (2020) that argues learners need to demonstrate their critical thinking by evaluating sources, constructing arguments, and synthesizing ideas in their academic writing. Thus, Critical thinking in academic writing requires the ability to critically evaluate, analyze, and synthesize the writing information and argument sentences using rational, valid, supported, and comprehensible.

In addition, academic writing and critical thinking are inseparably related because critical thinking ability helps students write a high-quality academic paper. It is in line with Pramonojati et al. (2020), who stated that academic writing and critical thinking are closely related, and scholarly writing ability indicates that students have mastered the critical thinking skills necessary to succeed in a university environment.

2.4. Previous Research

The researchers had reviewed several articles related to challenges in critical thinking and writing that are published within last 10 years to keep the relevancy. From those reviewed articles, the researchers gathered the results of the studies that address the challenges in developing critical thinking in thesis writing. These challenges categorized into 3 namely, psychological, personal, and linguistic.

Psychological challenges are challenges that arise from students' cognitive and mental processing. Psychological challenges according to O'Shaughnessy (2014) are factors that come from motivation, perceptions, thought patterns, emotions, and cognitive development. These challenges can significantly affect a student's critical thinking ability in writing an academic paper. These challenges addressed in the articles such as lack of learning motivation and writing anxiety. Furthermore, these challenges can lead to procrastination and poor time management and resulting in increased anxiety and decreased self-efficacy. Therefore, addressing psychological challenges is important to prevent the difficulties in developing critical thinking ability.

Personal challenges are a struggle that comes from individual attributes, skills, and characteristics. In addition, personal challenges influence the individual skills in doing a certain task including writing a thesis. Furthermore, the challenges can hinder students to develop critical thinking in writing thesis. Previous research reveals some challenges rise from individual struggle, it includes a lack of subject knowledge, lack of reading, lack of structuring essays, and authorial voice.

Linguistic challenges are challenges related to language proficiency and structure of a language or grammar. From several articles that reviewed, there are two big challenges that students face in linguistics, it was found that lack of English proficiency level and grammatical error. These challenges contribute on developing students' critical thinking in academic writing.

2.5. Strategies for Developing Critical Thinking in Writing Thesis

The researchers also reviewed relevant studies of strategies in developing critical thinking and writing thesis. There are few articles that discuss it and researchers found role of feedback, writing practice, and read critically. These strategies explained below.

From the review of strategies in developing critical thinking in thesis writing, few articles mentioned role of feedback is significant for students to develop their critical thinking. In Forbes' (2018) study, feedback is significant in the development of first-year undergraduate students' critical thinking skills. He emphasizes that feedback, particularly formative feedback, is essential in guiding students through the process of refining their critical thinking abilities. Forbes argues that feedback should be constructive, specific, and timely to be effective. Moreover, Forbes points out that feedback should encourage students to reflect on their thought processes and challenge their assumptions, thereby promoting a more critical and reflective approach to learning.

Another study by Tathahira (2020) identifies feedback as an important element in developing critical thinking among students in an online setting. Tathahira (2020) notes that online feedback can take various forms, including written comments, audio feedback, and

interactive discussions, all of which can significantly impact students' critical thinking development. Additionally, Tathahira (2020) emphasizes the importance of timely feedback in maintaining student engagement and motivation. Thus, the role of feedback is a significant for students because it can motivate and help students to think more critically.

The researchers also reviewed the article that highlight the importance of writing practice for improving students' critical thinking and academic writing ability. For instance, the study of Harb et al. (2022), the authors explore the significant impact of critical thinking on students' academic performance. The study reveals that students who actively incorporate critical thinking into their writing processes tend to achieve higher academic success. This is largely due to their improved capability to construct coherent arguments and critically engage with diverse sources. Moreover, through structured writing exercises, students learn to organize their thoughts, construct coherent arguments, and critically engage with source materials.

A study by Pramonojati et al. (2020), the emphasis is placed on the critical thinking skills necessary for students to effectively write the background section of research papers. The author explores how students approach the synthesis of information, the identification of gaps in existing literature, and the articulation of the significance of their research topics. Based on the finding of the study, Pramonojati et al. (2020) suggests a structured approach to literature review, emphasizing the importance of evaluating sources critically and synthesizing information to support a well-defined research gap. Techniques like questioning assumptions and analyzing the validity of sources are recommended.

3. Methods

The researchers employed a case study approach because the problem being researched is one case at the Master of English Education of Universitas Jambi. The case study is a qualitative research approach that requires the researcher to investigate real-life, single case, or multiple cases. Those cases are gathered through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports) (Creswell, 2019). So, the case study approach is employed in the present research to gain in-depth and detailed insights, particularly in exploring graduate students' challenges and strategies in developing critical thinking skills in thesis writing at Universitas Jambi.

Moreover, the case study approach is well-suited for the present research because it allows for an in-depth exploration of the complex, contextualized experiences of participants by focusing on a particular set of participants, the present research can comprehensively investigate their unique challenges and strategies in applying critical thinking to their thesis writing process. A case study provides the opportunity to gather rich, detailed data through various qualitative methods like interviews, observations, and document analysis, which helps uncover patterns, themes, and insights that might not emerge through other research methods.

The setting of this research was the Master of English Education Program at Universitas Jambi in the academic year 2024/2025. The participants are Master of English Education student batch 2023 who have undergone writing a thesis proposal. Furthermore, the source of data of the present research is from participants' experiences in developing critical thinking when writing the thesis and the data in the form of participants' experiences captured through audio recording.

The researchers carried out purposive sampling in selecting participants for this research. Haryanto (2020) argued that purposive sampling is a process of choosing the sample with certain considerations and criteria aimed at making the information obtained later more representative. So, the researchers can select and obtain representatives to participate in this research according to the criteria set by the researcher. The total participants in this research are decided by the willingness of students at Master of English Education at Universitas Jambi in the academic year 2024/2025. So, the researchers set criteria for participants as follows:

- 1) 3rd-semester students majoring in Master of English Education at Universitas Jambi.
- 2) Active students who have undergone writing a thesis especially those who completed chapter 1.
- 3) Students who are willing to participate in this research.

Participants who are selected must fill out a consent form letter, 1-10 students who meet the criteria will be selected as participants. From those 1-10 participants are selected because it is in line with Cresswell (2019) qualitative research sample guideline, particularly in case study.

3.1. Data Collection

To answer research questions, the researchers used the data collection method according with research design. In this research, the researchers employed a qualitative method using a case study approach so, the data collection techniques used is interview. The researchers used interview as a research instrument in collecting the data because it can help the researchers achieve the purpose of this research. Furthermore, it is broadly used to obtain detailed data in qualitative research. Haryanto (2020) states that interviews were conducted by two parties, namely the interviewer who asked questions and the interviewee who provided answers to those questions.

In principle, interview design and question preparation attempt to dig up more in-depth information from relevant sources in the form of opinions, impressions, thoughts, experiences, and so on. Furthermore, there are several types of interviews namely: structured, semi-structured, and unstructured. For this research, the researchers conducted semi-structured interviews, it is an interview process that uses an interview guide that is based on topic development and allows the use of questions more flexibly (Haryanto, 2020). Therefore, researchers used semi-structured interviews to prepare questions and develop questions based on the responses provided by participants.

Each participant was interviewed one by one, conducted face-to-face and in real-time. The entire interview process is recorded in the form of video and audio. The devices for recording are the researchers' laptop and smartphone. The duration of each interview ranges between 20 to 60 minutes. Participants were allowed to answer the questions in Indonesian or English. They can choose their preferred language, so they feel comfortable and can talk freely about their experiences. Besides, using preferred language can help the researchers obtains more detailed data from participants. After the interview, the researchers made the transcription.

Furthermore, the researchers used an interview protocol to guide the interview process. The interview protocol was developed by considering Finken & Ennis (1993); Paul & Elder (2006) theories and some previous research that reviewed such as Forbes (2018); Islamiyah & Fajri (2020); Mehta & Al-Mahrooqi (2015); Muflihun & Tohamba (2021); Pramonojati et al. (2020); Samanhudi & Linse (2019); Tathahira (2020); Thabran et al. (2022); Vyncke (2012); Wahyuningsih (2018). The interview protocol was designed with the expectation that the questions asked would provide answers relevant to the research questions.

4. Results and Discussion

4.1. Challenges in Utilizing Critical Thinking Skills

One of the goals of this research is to describe the challenges that TEFL graduate students have when attempting to utilize critical thinking skills when writing their theses. This section further focused on the challenges that the participants faced when writing their theses. Utilizing critical thinking skills to write the thesis presents numerous kinds of challenges, according to the researcher's findings. The table below outlines three major themes and sub-themes that represent the challenges TEFL graduate students face in utilizing critical thinking skills when writing their theses.

Table 1. Challenges in Utilizing Critical Thinking Skills

Challenges	Themes	Sub Themes
	Personal	Time management Balancing workload
	Linguistic	Structuring and Grammar Lack of English Proficiency Finding and managing sources
	Psychological	Low motivation Lack of self-confidence Writing Anxiety

4.1.1. Personal Challenges

Personal challenges stem from students' life situations, responsibilities, and individual management of tasks. It includes time management, balancing workload and avoiding biases and staying objectives.

1) Time Management

The challenge of time management among graduate students emerges as a significant barrier to utilizing critical thinking effectively. A majority of participants reported difficulty in managing their time due to other responsibilities such as work, household duties, and community involvement. One of the participants, P4 shared,

"I find it very difficult to manage my time for writing my thesis because I currently have many responsibilities..."

Furthermore, P4 add,

".....both at work and in the community, as well as household tasks."

These data underline the time management difficulties that participants experienced, thus holding back their writing progress. Ultimately leading to challenges in utilizing critical thinking skills due to their work. The challenge of time management among graduate students emerges as a significant barrier to utilizing critical thinking effectively. In addition, this fragmentation of time often leads to rushed or unfocused thesis work, hampering the depth of analysis and reflection necessary for critical thinking.

2) Balancing Workload

One of the Participants, P1 faced challenges in balancing thesis work with coursework or part-time jobs, as reflected in statements such as,

"...balancing my thesis work with projects from my other courses."

The P1 confesses that balancing thesis work with projects from other courses is challenging because he can't focus on one work at a time. Participants' difficulty in balancing thesis writing with other academic tasks indicates cognitive overload. Inability to focus on one task at a time prevents deep engagement with critical thinking processes such as evaluating evidence, constructing arguments, and synthesizing ideas. Cognitive load theory supports this,

asserting that excessive task-switching reduces working memory capacity needed for critical analysis.

3) Avoiding Biases and Staying Objective

Participants also noted difficulty in maintaining objectivity when analyzing topics they felt strongly about, revealing a struggle with critical detachment essential for thesis writing. For example, P2 shared that,

“The challenge is that sometimes it's difficult to remain objective, especially when we already have certain assumptions”

P2 clearly stated that it is difficult to remain objective, meaning it is difficult to avoid bias. This underlines the challenges in utilizing critical thinking skills according to Ennis' (1997) theory. In addition, the struggle to remain objective, especially on personally relevant or emotionally charged topics, reveals a key aspect of critical thinking—intellectual humility and fair-mindedness (Paul & Elder, 2006). Participants' 2 statement show awareness of personal bias but difficulty in applying strategies to counter it, underlining the need for better instruction on metacognitive regulation.

4.1.2. Linguistic Challenges

Linguistic challenges related to students' language use and academic writing skills in English. Based on the data analysis, these challenges are divided into structuring, grammar and vocabulary, finding and citing sources, and lack of English proficiency.

1) Structuring

Participants frequently reported struggles in maintaining logical flow and consistent tone. One participant, P4 noted,

“I find it very difficult to structure sentences in a concise and organized way.”

P1 also shared same difficulty as P4,

“Challenges here are staying consistent in tone and making sure everything flows logically.”

Participants noted that they had difficulty in structuring in organized way which means it is difficult to write a coherent and cohesive paragraph or sentence. This underline P4 difficulty in utilizing critical thinking skills accordingly to Paul and Elder (2006) theory, it includes stay coherent and consistent logical flow of argument in writing.

Challenges in organizing ideas coherently reflect participants' underdeveloped rhetorical awareness. Logical structure and coherence are essential for argumentative writing, which is central to thesis writing. The difficulty participants face in maintaining logical flow points to a limited application of critical thinking in textual organization and idea development.

2) Grammar and Vocabulary

Grammar errors and limited vocabulary were recurring issues, with one participant (P4) saying,

“My writing has many grammar errors”

and another participant (P2) noting challenges in

“I feel my vocabulary is limited, and creating smooth transitions between paragraphs is challenging.”

Frequent grammar errors and limited vocabulary hinder the clarity and precision of expression, both critical for presenting nuanced arguments. This linguistic barrier constrains students' ability to articulate complex ideas, weakening the strength of their critical arguments and making their theses less persuasive or coherent.

3) Finding and Citing Sources

Finding relevant and high-quality sources was another difficulty, compounded by the challenge of proper citation formatting and consistency. As P3 statement,

“finding high-quality, relevant sources and organizing them effectively has been difficult.”

Inadequate source selection and citation indicate problems in critical reading and evaluation skills. Participants struggle not only with identifying relevant literature but also with organizing and integrating it effectively. This reflects a gap in information literacy—a core component of academic critical thinking.

4) Lack of English Proficiency

Despite being English education students, some participants admitted to struggling with academic writing in English, as P2 stating,

“Even though I'm an English student, I sometimes still struggle with academic writing in English.”

Despite being English majors, students face difficulty with academic language use. This paradox underscores the complex nature of academic discourse, which goes beyond conversational fluency. It also highlights how linguistic limitations can obstruct the articulation of critical thought, reinforcing the interdependence of language proficiency and cognitive development.

4.1.3. Psychological Challenges

Psychological challenges arise from internal emotional and cognitive processes that affect students' ability to think critically and write effectively.

1) Lack of Motivation

Participants expressed fluctuating motivation due to the lengthy and overwhelming nature of the thesis writing process. For instance, participant 2 stated,

“...maintaining consistency in writing is challenging because sometimes I can get lazy about doing it.”

Fluctuating motivation levels suggest an emotional barrier to sustained critical engagement. The overwhelming nature of thesis writing can reduce persistence and focus, both crucial for evaluating and synthesizing information critically.

2) Writing Anxiety

Anxiety about writing quality and academic expectations become challenges as P3 mention

“I worry about the quality of my work and if it's meeting academic standards”

Fear of not meeting academic standards leads to paralysis or procrastination. Anxiety restricts cognitive performance, especially higher-order thinking like evaluating, analyzing, and critiquing which is a central element of critical thinking.

P2 also confessed her feelings of being *“overwhelmed and anxious”* during deadlines are commonly occur making her unable to utilize critical thinking in writing her thesis.

3) Lack of Confidence

Participant 2 mention her low confidence in academic writing skills, admitting to

“overthinking whether my writing is good enough for master's level.”

Self-doubt diminishes risk-taking in academic writing, leading students to avoid complex arguments or rely on surface-level analysis. This challenges also undermines the development of original thought and personal academic voice—key indicators of critical writing.

4.2. Strategies to Overcome the Challenges

After presenting challenges faced by the participants in utilizing critical thinking skills in writing the thesis, the second objective of this research is to explore the strategies applied by graduate students to utilize critical thinking skills in writing the thesis. Therefore, this section focused on the strategies used by graduate students to utilize critical thinking in writing the thesis and to address the challenges mentioned earlier.

Table 2. Finding of Strategies to Overcome the Challenges

Strategies	Themes	Subthemes
	Technological Support	Artificial Intelligence (AI) Writing Tools
	Time Management	Setting up Deadlines Task Prioritization
	Reference and Citation Support	Evaluating Sources Read More Literature
	Writing Practice and Support System	Skill development Seeking Support

4.2.1. Technological Support

1) AI Tools

Most participants utilized AI platforms like ChatGPT, Perplexity, and paraphrase tools to assist with paraphrasing, grammar checking, and understanding academic texts. P4 shared, *“I use ChatGPT to help with my thesis... then evaluate the responses to refine my writing.”*

The use of tools like ChatGPT and paraphrasing software indicates an adaptive strategy for overcoming linguistic and structuring challenges. While helpful, there is a risk of over-reliance, which might reduce the development of independent critical skills unless used critically and reflectively.

4.2.2. Writing Tools

Writing tools like Zotero, Grammarly, Quilbot, and Mendeley were used to manage references and citations efficiently. Participants emphasized how these tools streamlined their writing process. As P3 mention it,

“I use reference management software like Zotero to organize my sources, which helps a lot in keeping my references structured. I also use Google Scholar and academic databases for finding high-quality sources.”

P2 also share same opinion as P3,

“I use Mendeley for managing references, Google Scholar and journal databases for finding references”

Reference managers and grammar checkers streamline technical aspects of writing, allowing participants to focus more cognitive resources on critical thinking and argument development. Their use reflects metacognitive awareness—students are identifying and using external tools to manage their writing challenges.

4.2.3. Time Management

1) Managing Deadlines and Goals

Participants developed techniques such as creating timelines, setting daily/weekly goals, and breaking the thesis into smaller sections. One of strategy from P3 was to

“set small deadlines to keep myself on track.”

P3 also add,

“I organize my work by setting smaller goals, like completing one section or finding specific sources each week”

Breaking tasks into smaller sections is a well-documented strategy in self-regulated learning. It helps mitigate procrastination, reduce cognitive load, and create opportunities for reflective thinking. Students who apply this show greater autonomy in managing their academic process, which supports the development of critical thinking.

4.2.4. Reading and Evaluation of Sources

1) Evaluating Sources

Participants were cautious in evaluating the credibility of their sources, prioritizing peer-reviewed journals and academic databases. Participant one said,

“I focus on the credibility and relevance of my sources.”

Furthermore, P2 explain how she evaluates the sources,

“To analyze reference sources, I usually pay attention to several aspects, such as the credibility of journals or publications, publication year (especially for AI topics, I try to use references from the last 5 years), research methodology, and relevance to my topic”

Participants demonstrate awareness of the importance of source credibility and recency, especially for fast-evolving topics like AI. This critical engagement with sources is a positive indicator of evaluative thinking, an essential component of critical literacy.

2) Extensive Reading

Reading widely was considered essential. participants read journals, books, and articles related to their thesis topics, which helped them improve both understanding and vocabulary. For example, P2 state that she read article from various sources

“I read many journals about AI in education, academic writing, and the use of technology in language learning. My main sources are from databases like Google Scholar, Research Gate,”

Reading broadly across literature allows students to compare perspectives, synthesize information, and identify research gaps. These practices nurture intertextual critical thinking and deepen understanding of thesis topics.

4.2.5. Writing Practice and Academic Support

1) Regular Writing Practice

Participants emphasized the importance of writing practice, including writing tasks assigned in coursework. P3 noted,

“Regular practice in reading academic articles and writing helps me improve my skills over time.”

Practice in writing enables iterative thinking and refinement of arguments. Through practice, students gradually build fluency in academic discourse and internalize structures of critical argumentation.

2) Seeking Feedback and Support

Guidance from supervisors and peers was frequently cited as helpful as P1 participant mentioned,

“Talking things out with my supervisor or friends usually helps me find a solution.”

Engagement with supervisors and peers facilitates external evaluation, offering students new perspectives and constructive criticism. Such interactions not only improve the quality of writing but also promote dialogic thinking, a hallmark of critical thinking skills.

4.3. Discussion

The findings of this study show that TEFL graduate students face various challenges and apply several strategies in developing critical thinking during thesis writing. These results are important because they do not only describe individual problems but also connect to broader issues in higher education and EFL learning context. It confirms that developing critical thinking is not only about learning theory but also related to personal conditions, emotional aspects, and language ability. This makes the problem important because it reflects how academic environment and students' personal background influence their capacity to think critically in writing.

4.3.1. Challenges in Critical Thinking

The personal challenges such as poor time management and difficulty in balancing workload show that many graduate students struggle to maintain focus and reflection in their writing process. These problems are not only personal but also structural, meaning that university policy and supervision system might not fully support students who have multiple responsibilities. When students have to divide their attention between work, family, and academic tasks, it becomes hard to engage deeply with their research. As a result, their writing often becomes more about completing tasks than developing critical analysis. This situation reflects a bigger issue in higher education about how institutions prepare and guide graduate students to become independent and reflective thinkers. In addition, the difficulty of balancing multiple academic tasks frequently pushed students into a reactive mode of working, completing assignments to meet deadlines rather than engaging with content meaningfully. This challenge supports prior studies (e.g., Farizawati et al., 2024; Wati et al., 2024) that argue that academic environments lacking adequate structural support are likely to discourage deep thinking and sustained reflection.

Linguistic challenges also appear as an important barrier to utilizing critical thinking skills. The difficulties in structuring ideas, grammar, and vocabulary often cause the students' writing to lack clarity and logical flow (Samanhudi & Linse, 2019). However, the finding also highlights the specific role of AI tools like ChatGPT in addressing these gaps, suggesting their growing importance in linguistic skill development. Additionally, previous studies predominantly focused on linguistic challenges; this research highlights the compounded effect of low English proficiency, leading the arguments to become weak and unconvincing. It implies that language mastery and critical thinking should be integrated in teaching academic writing, since the ability to express an argument clearly depends much on how well students can use language to shape their reasoning. In other words, thinking and language are strongly connected, and both must be developed together in higher education context. Additionally, difficulties in structuring essays such as introducing and concluding arguments effectively or sequencing paragraphs logically indicate a lack of familiarity with academic conventions. As Mehta & Al-Mahrooqi (2015) suggest, structuring is both a linguistic and cognitive skill, and deficiencies in this area point to broader issues of organization and reasoning. These challenges also reflect an underutilization of Ennis's critical thinking skills, such as recognizing assumptions and organizing arguments systematically.

The psychological challenges, including writing anxiety and lack of confidence, also strongly affect how students engage with their thesis. Anxiety about making mistakes or not meeting academic standard can limit students from exploring new ideas or taking intellectual risks. This fear often leads to self-doubt and avoidance behavior, which slows down their writing progress. As response, students report how they build confidence through constructive feedback and regular supervision. Low motivation often stemmed from a lack of self-confidence and emotional fatigue. Students expressed a tendency to procrastinate, avoid

writing, or abandon drafts due to self-doubt. These behaviors can be linked to what Ennis (1996) describes as low levels of curiosity and cautiousness, two dispositions that are critical for sustaining critical engagement. Writing anxiety, particularly cognitive anxiety, was another persistent theme. This kind of anxiety led to mental blocks, overthinking, and perfectionism, hindering students from expressing nuanced arguments or taking intellectual risks in their writing. Therefore, it is essential to help students think more openly and critically by encouragement from supervisors or peers that can give emotional relief and motivate students to continue improving their argument and writing structure.

Despite facing many challenges, the findings also reveal that graduate students are capable of adapting and finding creative strategies to overcome their problems. The use of technological tools such as AI platforms, grammar checkers, and reference managers shows that students are learning to use digital resources critically. Instead of relying fully on these tools, most of them use the technology to refine their writing and check for accuracy, which indicates self-awareness and reflective learning behavior. This practice also represents a form of metacognitive skill, where students learn how to evaluate and control their own thinking process during writing.

Moreover, time management strategies like setting personal deadlines and dividing tasks into smaller parts help students reduce pressure and stay consistent in writing. Reading more academic sources and seeking support from supervisors or peers also enhance their understanding and stimulate more critical engagement with literature. These strategies demonstrate that the students are not only focusing on completing their thesis but also on improving their analytical and reasoning skills through continuous learning.

5. Conclusion

In conclusion, the study reveals that EFL graduate students at Universitas Jambi face various challenges in utilizing critical thinking skills during thesis writing. These challenges fall into three main categories: personal, linguistic, and psychological factors. Personal challenges such as time management and balancing workloads, linguistic difficulties like structuring arguments and managing grammar, and psychological obstacles such as writing anxiety and lack of confidence, collectively hinder students' ability to apply critical thinking effectively. To address these challenges, students employed strategies such as leveraging AI tools, improving time management, critically evaluating sources, and seeking support from supervisors and peers.

The reliance on AI tools like ChatGPT and Perplexity AI raises concerns about their influence on critical thinking development. While they effectively enhance grammar and coherence, overdependence could undermine students' ability to independently evaluate and synthesize information, a foundational element of critical thinking. Moreover, the study primarily focuses on students' experiences, without addressing systemic factors such as curriculum design or faculty training in critical thinking instruction. Future research should investigate the role of institutional frameworks in fostering critical thinking skills and how AI can be integrated responsibly.

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