

Intertextuality in Pre-service Teachers' Argumentative Essay in Raising AI: Practices and Beliefs

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Abstract

English as a Foreign Language (EFL) pre-service teachers arguably face more challenges regarding rhetorical moves in argumentative essays, and one of them is intertextuality because EFL pre-service teachers' arguments require sufficient and high-quality support and evidence from other scholars. Intertextuality was mainly studied, grounding in texts without external tools, such as, Artificial Intelligence (AI). In a rising AI era, the objective of this study is to investigate Indonesian EFL pre-service teachers' intertextuality in argumentative essays assisted by AI. Ten EFL pre-service teachers who attended sixteen courses in Academic Writing, with neither teaching nor writing experience, were recruited as participants. We employed a case study design to portray the nature of the phenomena, and the data were collected through documents (academic essays) to portray the practices, and interviews to represent teachers' beliefs on explicit and implicit intertextuality beyond their argumentative essays in facing AI. We employed content analysis from academic essays and interviews. The findings show that 1) EFL pre-service teachers mostly used reporting phrases and iconic references, but they were oriented to local references that targeted local audiences, so international references should be more practiced; and 2) EFL pre-service teachers' beliefs that assistance using AI while writing argumentative essays was limited to writing accuracy, but it helped them to focus on

intertextuality. Although they were enough to give sufficient intertextuality references in practice, they could not present their voices to tailor their arguments. Moreover, the intertextuality praxis and policy implications will be discussed in EFL pre-service teachers' argumentative essays assisted by AI.

Keywords: academic essays, artificial intelligence, EFL pre-service teachers, intertextuality

INTRODUCTION

To help EFL pre-service teachers become skilled writers, having only knowledge and teaching experiences in argumentative teaching strategies is insufficient. However, a broader understanding and practice of argumentative essays is necessary for success (Valdivia & Martínez, 2018). Moreover, writing plays an essential role in connecting EFL pre-service teachers to academia and teacher community practices based on expressing their creative teaching of ideas, relating to teachers' community, preserving cultural and social relevance, and achieving professional requirements (Latham, 2020; Yoo, 2018). More specifically, argumentative essays can elevate EFL pre-service teachers' scientific thinking by integrating causal claims with supporting evidence in the writing process (Valdivia & Martínez, 2018).

Moreover, one of the essential elements in the argumentative essays is intertextuality, so it requires knowledge of citations. Therefore, pre-service teachers should be capable of critically navigating in a body of literature, critical reading, and critical writing to argue and give sufficient evidence to support their arguments. Kristeva (1996) acknowledges all texts are interconnected through references, so pre-service teachers could distinguish various voices in their argumentative essay between their own and experts to avoid plagiarism.

Furthermore, the current body literature on intertextuality mainly discussed intertextuality and plagiarism awareness (Hu & Shen, 2021), literature review on the thesis (Badenhorst, 2017), writing e-mail (Bremner & Costley, 2018), writing social arguments (Olsen et al., 2018), and online writing (Strickland, 2019). Furthermore, intertextuality was reported to be the most challenging part for pre-service teachers in writing argumentative essays (Valdivia & Martínez, 2018). With the rise of AI, there is scant evidence for intertextuality study in argumentative essays assisted by AI. Therefore, this study explored EFL pre-service teachers' intertextuality practices and beliefs in argumentative essays assisted by AI.

Pre-service Teachers on Intertextuality in Argumentative Essays

Argumentative essays are essential for pre-service teachers during academic years in universities because numerous subjects require them to develop argumentative skills and critical thinking. These skills were developed through various writing projects, including classroom reports, mini-research projects, graduation papers, and similar assignments. In writing scientific argumentative essays, pre-service teachers must have sufficient skill to justify whether they accept or reject other ideas based on scientific principles or knowledge. Furthermore, justification of pre-service teachers' arguments can be found in three operations (Jorba et al., 2000):

1. Producing arguments or claims;
2. Establishing relationships that modify the epistemic value of arguments according to available knowledge;
3. Examining the validity of arguments according to available scientific knowledge.

Pre-service teachers use their prior knowledge to construct scientific arguments to convey perspectives and values to their readers. Scientific arguments go beyond simply organizing theories and empirical studies in order, but teachers involve critical reflection and evaluation. Prior studies on argumentation within educational settings have primarily centered on pre-service teachers' argumentative essay training (Fajaryani et al., 2021; Valdivia & Martínez, 2018), pre-service teachers' collaborative writing (Rosales et al., 2020), and where scholars also employed various technologies AI chatbot (Guo et al., 2022) and mind mapping (Barzilai et al., 2021). However, those studies did not explicitly discuss pre-service teachers' intertextuality of argumentative essays. Moreover, Castelló et al. (2011) point out that the quality of scientific argumentative essays can be assessed according to their structure and the argumentative nature of academic texts, including three criteria, and one of them is intertextuality:

1. Intertextuality refers to dialogue established with other texts and authors used as an explicit reference. It includes: (i) sufficiency, clarity and relevance of statements; (ii) evaluative comments on statements, use of other texts or voices with that purpose; (iii) convergence with other accepted theories, laws or models.

2. Critical approach is characterized by the writer's stance and the use of discursive resources for: (i) making personal attitudes and choices explicit according to assumptions and evidence; and (ii) achieving coherence between arguments and ideas to convince a given audience.
3. Formal aspects represent of texts that follow specific rules on formal discourse elements. Such characteristics include command of technical language, and grammatical and spelling correctness.

Moreover, among quality of argumentative essays (e.g., intertextuality, critical approach, and formal aspects), intertextuality was found to be an area that requires room for improvement because pre-service teachers lack the ability to argue and explain the relationship within intertextuality (Valdivia & Martínez, 2018). Therefore, this study focused on the intertextuality aspect, so we expect that pre-service teachers have wider understanding to differentiate various voices (e.g., experts studied theory, methodology, and empiric; and their own voices as writers to interweave and critically reflect).

The concept of intertextuality, influenced by Kristeva (1996), proposes that all texts are interconnected. Moreover, intertextuality can be defined as how writers incorporate existing texts and audiences to generate a fresh text and audience. It embodies the post-modern idea that every new text element has a background and can be linked to its origins. Essentially, intertextuality involves portraying other sources within one's writing (Badenhorst, 2017). Furthermore, Groom (2000) acknowledges as a "given point whose "voice" is "speaking" (p. 15). Therefore, the origin of the idea can be traceable. When writers do not quote or cite, readers will be expected to take responsibility for the statement and credit.

However, Bazerman (2004) acknowledges two types of intertextuality, including, explicit (evident through direct source citation) and implicit (only be discerned by knowledgeable individuals within a discourse community). Furthermore, explicit and implicit intertextuality can connect a text or statement to previous, current, or possible future texts (Bazerman, 2004). Moreover, implicit intertextuality relies on commonly circulated beliefs, issues, ideas, and statements, often considered common knowledge. However, recognizing and understanding the underlying connections and the voices behind the text may require additional or background knowledge, especially for individuals not part of the specific community or context in which the text originated.

Arguably as the most challenging part of writing, Farrelly's (2020) work notes that Fairclough (1992) operationalized Kristeva's idea about intertextuality to 'make the concept of intertextuality somewhat more concrete by using it to analyze texts' and to 'set out rather more systematically the potential of the concept for discourse analysis' (p. 101). Fairclough (1992) divided intertextuality into six forms (e.g., discourse representation: direct discourse, discourse representation: indirect discourse, presupposition, negation, meta-discourse, and irony). However, Fairclough (1992) also faced criticisms by Farrelly (2020) in terms of the fact that 1) presupposition and negation are problematically viewed by manifestation of intertextuality; 2) presupposition and negation should be included in assumption; and 3) meta-discourse should be excluded because it represents the text itself, not other texts. Therefore, Fairclough (2003) narrowed down his idea about intertextuality by referring to 'the presence of actual elements of other texts within a text – quotations' (p. 39).

EFL Pre-service Teachers' Academic Essay Challenges on Raising AI

Many EFL pre-service teachers have complained because they had inadequate English language proficiencies, so their manuscripts were difficult to follow (Vintzileos et al., 2023). In the case of pre-service teachers, some needed to make a graduation paper, although they did not need to publish it. They were tested by internal examiners from their campus. Some of them gave up during the writing of the graduation paper and did not graduate from university. However, writing has become easier for pre-service teachers because they can get 24-hour-assisted language from Artificial Intelligence (AI). AI is not new in education, but it has become more advanced. Since the 1950s, Artificial Intelligence (AI) has been in multidisciplinary and interdisciplinary growth discussions among scholars, from conceptual to practical, by mimicking human intelligence, for instance, in language skills (Chowdhary, 2020; Haenlein & Kaplan, 2019; Lund et al., 2023).

Moreover, generative AI is different from AI tools. Generative AI offers a "shortcut" to the writing process, and it becomes a concern to scholars to ethically educate pre-service teachers on what they could do and what they could not do with AI for writing argumentative essays. Moreover, the emerging integration between generative AI and various writing tools (e.g., Google Docs, Grammarly, and Turnitin) was used to improve writing quality in terms of accuracy and decrease plagiarism (Ebadi & Rahimi, 2019; Li & Li, 2018; Liao, 2016).

Therefore, pre-service teachers' skills in intertextuality were challenged and they should have the ability to distinguish and articulate various voices of writers and prior scholars. Moreover, employing writing tools powered by AI that could offer collaborative writing, so they did not limited to shortcut use to produce writing product, but writing process in peer review could be done to maintain accuracy and fluency that were missed by AI's feedback (Ebadi & Rahimi, 2018, 2019; Li & Li, 2018). Therefore, the roles of AI and peer reviewers could strengthen feedback generated by AI and peer reviewers. Moreover, pre-service teachers can take benefit from focusing more attention on the quality of argumentation because writing accuracy can be assisted by AI so that pre-service teachers can focus on other areas of writing process (Cotos et al., 2020; Knight et al., 2020; Palermo & Wilson, 2020; Shermis & Hamner, 2013).

In November 2022, more advanced AI - ChatGPT or AI chatbot - was massively used by various users until it reached over 100 million users (Meyer et al., 2023; Vintzileos et al., 2023). Moreover, this AI could also improve "several aspects of language, such as vocabulary, spelling, punctuation, and grammar" (Vintzileos et al., 2023, p. 89), where Grammarly was already offered. Although this AI chatbot could have similar roles like Grammarly, Quillbot, RewriteGuru, etc., this chatbot can elevate by generating arguments. AI not only generates sentences but also creates paragraphs. However, the validity and reliability of the result have been criticized by scholars.

Although ChatGPT's use in language classrooms has been debated, EFL teachers have also shown a positive attitude toward implementing ChatGPT to enhance traditional language classrooms (Mohamed, 2023; Ulla et al., 2023). Ulla et al. (2023) point out that teachers' role and technology knowledge should be empowered to implement ChatGPT in the classroom where the role of ChatGPT could help teachers to assist students in problem-solving activities during their studies. In comparison, traditional classrooms mostly position teachers as the main sources to provide feedback. Moreover, in the EFL context, students indicated high affective filters while learning English in the classroom, and ChatGPT helps to reduce students' affective filters because they could get assistance before performing English (Mohamed, 2023).

However, when it comes to writing, pre-service teachers have faced teaching dilemmas in terms of three main issues using AI in academic essays, including 1)

authorship, 2) copyright, and 3) plagiarism (Lund et al., 2023). Moreover, authorship issues related to the intertextuality of the text became ambiguous when the AI produced the arguments because they might produce arguments based on the data and without directly citing the authors. Moreover, the practice of citation was essential for early career researchers to be introduced. Furthermore, it raises the question, "Is a graduation paper still reliable as one of the graduation requirements?". However, this also reminded policymakers and faculty members of a question: if they did not practice from their undergraduate years to write academic essays, how do they survive when they pursue master or doctoral degree or work in a research field because they need to publish journal articles as a graduation requirement?

Today, academic essays are challenged by generated AI. AI can develop argumentation for academic essays, which is painful to scholars who spend many hours navigating, reading, and writing. However, scholars and educators cannot ultimately hinder academic writing classes, but AI literacy should be introduced to pre-service teachers so they can use AI wisely. Regarding management, beliefs, and practices, Indonesian education in the context of this study reform should be carefully reviewed. Although the existence of AI has tremendously impacted various aspects, it must be noted that AI cannot replace pre-service teachers' critical reading and writing because AI does not comprehend the same way as professional writers do. We speculate that AI can assist English language quality, but it still requires critical review from the writers. Therefore, this study attempted to unfold the status quo of AI in argumentative essays from intertextuality because educators need clear borders to use AI in the classroom, especially in academic essays referring to previous works. We generated two research questions.

- 1) What are the characteristics of pre-service teachers' intertextuality in argumentative essays facing AI?
- 2) How do pre-service teachers' beliefs on argumentative essays with AI contribute to intertextuality selections?

RESEARCH METHOD

To portray the nature of the data, we employed case study research (Yin, 2018), where we investigated ten EFL pre-service teachers who practiced writing argumentative essays in one of the university courses in Indonesia. This program employed writing tools powered by AI called Scribo. It is capable in terms of 1) classroom management, grouping students in some classes and groups, 2) seeking feedback (e.g., self-feedback, peer-feedback, and AI-feedback), and 3) providing initial scores in each progress and detailed language proficiency progress.

During this study, they were in the stage of beginning practice, so it was only focused on the introduction of argumentative essays. Therefore, EFL pre-service teachers' introductions were based on create-a-research-space (or CARS) model (Swales, 2014), including: establishing a research territory, establishing a niche, and occupying the niche.

There were sixteen meetings during this study. This program allowed pre-service teachers to review each other's argumentative essays. During the first and third meetings, students were educated about AI literacy in argumentative essays and how to use Scribo for argumentative essay purposes. Further meetings were started by introducing Swales's (2014) concept of create-a-research-space (or CARS) model, and pre-service teachers practiced writing and reviewing. Moreover, we provided a consent form and got permission to use their argumentative essay as the primary data source. The course's main argumentative essay topics focused on integrating technology into teaching.

To collect the data, we collected documents, argumentative essays, to be analyzed through content analysis. Moreover, we also used interviews (e.g., 1) What types of references do you use to support your argumentative essay?; 2) How far does AI assist you in writing your argumentative essay?; 3) What challenges do you face in using references to support your argumentative essay? And How do you face it?; 4) Do you use any AI from third-party apps instead of built-in AI in our learning management system?) with stimulus recall; the purpose was to investigate and clarify the nature of the teachers' text claims and the underlying value system underlying the attributions made about argumentative essays assisted by AI.

In the data analysis process, we employed Bengtsson's (2016) content analysis. First is "decontextualization;" we familiarized ourselves with the data by

reading the argumentative essays to know what was happening in the practices and reading the interview results to understand what was happening with pre-service teachers' beliefs. During the decontextualization, we labeled the data with code to start open coding (e.g., reporting phrases, named text whole text, iconic references, etc.). Second is "recontextualization;" we reread all data and highlighted to distinguish each meaning-making from the data. During this process, we compared highlighted data with research questions and aims of this study and excluded out-of-topic data. Third is "categorization;" we categorized selected data into practices and beliefs of intertextuality. Then, we grouped the selected data into sub-themes under practices and beliefs. Fourth, "compilation", we analyzed grouped data under Farrelly's (2020) intertextual reference types as references. To check the consistency of our analysis, we referred back to the original data. To strengthen the validity of the data, we employed intercoder reliability. The first author played as the main coder, and the other authors were the co-coders. We worked under Bengtsson's (2016) content analysis in different places and met to see similarities and differences among our coding data. Then, we excluded some of the data that were differently interpreted and did not meet the agreement of the interpretations.

FINDING AND DISCUSSION

Pre-service teachers' intertextuality practices in argumentative essays with AI

At the macro analysis, this study grouped introductions based on Swales's (2014) create-a-research-space (or CARS) model. We found that all teachers already fulfilled the criteria in general, but they lacked coherence and cohesion. They mostly quoted previous studies and Indonesian policies without considering connector sentences or ideas. Theoretically, scientific arguments must be built based on sufficient justifications and teachers' skills in determining or locating their works, whether they agree or disagree with the prior studies (Castelló et al., 2011; Jorba et al., 2000). We added that the teacher-teacher reviewing process during the academic writing course was insufficient to build the skills in the short term. We argued it required a long-term commitment to make pre-service teachers engage with the lecturer in the same discourse.

Intertextuality is the most challenging part of argumentative writing (Valdivia & Martínez, 2018), and we found that pre-service teachers required sufficient navigating skills as a foundation. Therefore, pre-service teachers seemingly overclaimed; for instance, teacher 3 stated "However, none of the previous studies showed the influence and effectiveness of augmented reality on the writing abilities of students. (*Step 1B: Indicating gap*)". However, this statement was not sufficiently supported by prior studies, such as studies on literature review, systematic review, critical review, etc., because they did not put more effort into navigating or reading the literature, although they were already trained. In line with Valdivia and Martínez's (2018) work, their participants had challenges developing argumentative thesis and generating intertextual dialogue. Moreover, this study added that pre-service teachers' introductions are less focused on some key areas or variables in the introduction; for example, teacher 3 neglected descriptive texts, writing skills, and the context of the research with senior high school students. Teacher 3 only focused on one of the media that was not commonly used in Indonesia and without any specific regulation for education. Similar to prior studies reports, they found EFL pre-service teachers sufficient in terms of micro-skills (e.g., grammar and vocabulary), macro-skills (e.g., coherence and cohesion) in writing (Fajaryani et al., 2021; Valdivia & Martínez, 2018) although we found from our mental process with pre-service teachers that they tend to more skills on cognitive, meta-cognitive, and social strategies. Therefore, we argued that the complex system of the writing process and sufficient writing skills must be built from pre-service teachers' awareness of intertextuality when they have adequate cognitive, meta-cognitive, and social strategies.

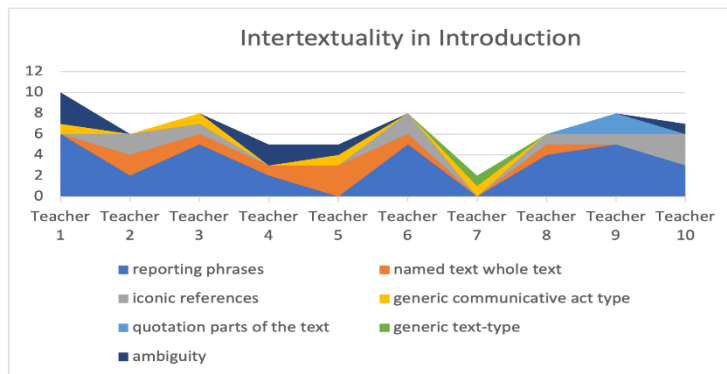


Figure 1. Pre-service Teachers' Intertextuality

Our content analysis shows that pre-service teachers mostly used reporting phrases (n= 32), named text whole text (n= 9), iconic references (n=10), and generic communicative act type (n= 4) from the introduction; quotation parts of the text (n= 2), generic text-type (n= 1), and ambiguity were used (n= 7). In Figure 2, pre-service teachers use many reporting phrases, seemingly forgetting that argumentative writing is not limited to reporting previous studies to support the argumentation. Furthermore, pre-service teachers' intertextuality is displayed (See Table 3) as representing teachers' works.

Table 1. Examples of Pre-service Teachers' Intertextuality

Types	Examples
Quotation Parts of the text	Language program evaluation enables "a variety of evidence-based decisions and actions, from designing programs and implementing practices to judge effectiveness and improving outcomes" (Norris, 2016, p.169-189). (Teacher 9)
Reporting phrases	<p>This previous study reported that the students in night grades' reading motivation are strongly influenced by their school-related reading practices (Tegmark et al., 2022). (Teacher 2)</p> <p>In relation to the effectiveness of learning English as Foreign Language (EFL), the previous research stated that the interaction relationship between teachers and students is also one of the factors supporting success (Vattøy & Gamlem, 2020). This research was conducted in two junior high schools with the aim of knowing the quality of interaction between teachers and students and provide feedback in teaching English as a foreign language (EFL). This research was conducted through the analysis of video recording data from 13 classrooms conducted 65 English learning. The result revealed that interaction between teacher and students and providing feedback is a regulatory process needed to achieve the learning objectives. This research found that English teachers in those two schools were still struggling to provide positive feedback so that it could influence students' learning to be more effective. (Teacher 9)</p>
Named Text Whole text	<p>Information and Communication Technology (ICT), in addition to pedagogy integration, refers to three key factors (Setyawan & Istiawan 2021): pedagogy, technology, including social interaction. (Teacher 4)</p> <p>Oakley (2011) stated that reading is a skill of combining background knowledge with reading texts. (Teacher 6)</p>

Types	Examples
Iconic Reference	<p>According to RI Law No. 20 of 2003 about the National Education System, early childhood education is a coaching effort directed at children from birth until the age of six. (Teacher 10)</p> <p>Another piece of research about reading from PISA (Program for International Student Assessment) shows that Indonesia's literacy rate is low compared to other countries in the world. This is the result of a study of 72 countries. Indonesia is ranked 62 out of 70 countries surveyed. (Teacher 2)</p> <p>The government's policy of allowing elementary schools in Indonesia to teach English starting from the fourth grade (Depdikbud, 1994) provides early readiness for L2 students in Indonesia to master English as a second language. (Teacher 8)</p>
Generic Text-type	<p>They said that according to the Program for International Student Assessment (PISA) report, Indonesia has a low literacy mastery problem. (Teacher 7)</p>
Generic Communicative Act	<p>The Indonesian government has created a curriculum, called curriculum 2013. In this curriculum, the process of English class requires the use of a scientific approach in the learning process, where the learning is more focused on students' activity rather than teachers' activity. (Teacher 7)</p> <p>In the case of COVID-19 in Indonesia, the Indonesian government decided to suspend all school-related activities in March 2020 to keep up against the virus. The Ministry of Education in Indonesia recommended schools establish remote teaching arrangements and provide online education possibilities for children. (Teacher 5)</p> <p>The government through the ministry of education made various adjustments to learning activities during the pandemic. One of them is the implementation of an online class system. (Teacher 1)</p>
Ambiguity	<p>There are many studies being conducted and compared to evaluate the effectiveness of written asynchronous computer mediated communication (WACMC) and oral face to face interaction (OF2F) that is used to give feedback in writing class. (Teacher 1)</p> <p>Despite the rise in popularity of digital games as pastimes and research demonstrating the affordability of digital game-based language learning (DGBLL) for English as a Foreign Language (EFL), DGBLL is not widely used in Indonesia. (Teacher 4)</p>

As novice writers, pre-service teachers showed a low level of intertextuality because they were in an ongoing process of developing reading experience to recognize theoretical, conceptual, and empirical studies to layer their complexity of arguments (Badenhorst, 2017; Hu & Shen, 2021; Valdivia & Martínez, 2018). Valdivia and Martínez (2018) found that the most challenging part is that novice teachers tend to use direct citations. In contrast, our analysis showed why more experienced teachers used indirect citation in the form of "reporting phrases" without considering their voices, so they only reported (see Table 1 "reporting phrases" from Teacher 9). Teacher 9 only summarized what prior studies were conducted and found without critical analysis of other studies or relationships to Teacher 9's study. Teachers argued by providing various sources that could make their augmentative text because they developed based on facts. We found that many pre-service teachers did the same things because they forgot to interweave what prior studies had already seen and their argumentation. Furthermore, complexity of represented citations draws pre-service teachers' capacity on intertextuality, and our study showed teachers cited on the level of empirical studies and left behind the theoretical or conceptual framework.

In the introduction of argumentative writing, pre-service teachers providing clear definitions become valuable for readers because readers might need help understanding some discourse used in some studies. Some pre-service teachers tended to give descriptions or parameters of their key terms in the introduction by using "named text whole text." However, some teachers also used "ambiguity, referring to some knowledge or terms from previous studies without clearly mentioning who is speaking in the text.

Pre-service teachers' beliefs on intertextuality in argumentative essay with AI

Using a writing management system powered by AI made pre-service teachers believe they could focus on their arguments. However, pre-service teachers seemingly followed Indonesian writers in local journals where they wanted to show their knowledge and expertise about government policies related to education. Sezen-Barrie et al. (2017) also found a similar movement of teachers to use government resources as references. Still, their study showed that teachers supported government policy and that rebuttal was presented. Our participants tended to play safe and hold their norms; rebuttal was stereotyped as an impolite movement. Furthermore, international readers might see this act as uninterested

reports because pre-service teachers only reported and did not critically elaborate on previous regulations or other countries' similar policies (see Table 1 "Iconic Reference and Generic Communicative Act").

Before I thought my research and writing did not need to be perfect, my audiences are not experts, and I do not need to publish. Therefore, I used local resources to build a context of the study in my introduction. However, when I wrote my academic writing, the AI gave me scores that motivated me to write better. I did not want scores under 70. Although it was very difficult for me as a novice writer to get higher scores, I was zealous to write the topic because it was based on my research interest. (Teacher 1)

I learned that I need to be careful in selecting resources as references, for example, when my participants are in junior high school, I need to find the same participants on my topics to compare the result with the literature. But, I believe in my introduction that I need to put what is going on in my country to give updates to local readers. (Teacher 10)

Putting more arguments and facts based on local reports or government policies, it is more valuable for other Indonesian readers because they might replicate my idea in their classroom and be considered by local context and published in a local journal because I am still new so local journal probably is good step to enter academia. (Teacher 3)

Pre-service teachers' beliefs seem to be reproducing knowledge rather than seeking new knowledge from the current body of literature (Badenhorst, 2017). Pre-service teachers argued their academic writing as a practice to conduct classroom research to help students for local audiences, so they did not need to achieve novelty in their work.

Moreover, AI made them keep on revising because it provided initial scores of their arguments. Therefore, pre-service teachers could reflect on the scores and target higher scores from AI. Although in self-assessment, AI scores did not finally score pre-service teachers, it is considered external feedback for internal feedback seeking. They built awareness of what they could seek or not from AI for the writing process (Guo et al., 2022).

Moreover, pre-service teachers' intertextuality capacity was not magically changed because we found their capacity to use intertextuality was still developing and insufficient, and they needed more time to practice. Furthermore, we found that pre-service teachers only reported and forgot to argue, so their voices were not represented in their works. It indicated a lack of pre-service teachers' reading and writing strategies.

I find it challenging to synthesize by creating a group of similar studies' results into one argument. Although my class gave me the idea to use mindmapping, it is not an essay to write my work's result. Although I did not get lost in my writing, tailoring and summarizing the idea was difficult. (Teacher 7)

The AI is quite helpful in checking my vocabulary use and grammar, so I do not worry about my summary or paraphrasing from other scholars. However, if the AI could not differentiate between my claim and my citation, it could benefit someone who learned academic writing. I still relied on my friends' or lecturer's feedback about my citations. Because this was my first time learning to cite and write a paragraph, I needed to combine many resources. AI was beneficial for me to avoid plagiarism because it provided me with feedback about paraphrasing or summarising. (Teacher 4)

After attending this class, I realized that I needed to read the journal articles I cited because I tried to compare them with the results of ChatGPT, but it was different. I felt embarrassed if I misinterpreted by following the AI about paraphrasing. Then, I strategized using AI to give me more options about vocabulary when I paraphrased. My lecturer showed that if I directly copied and pasted from ChatGPT, Turnitin could also detect my plagiarism with AI from my citation or summary. This class made me aware that I could use AI, but I need to use it wisely. (Teacher 2)

Those strategies need to be supported by pre-service teachers viewing intertextuality as a way to critically interact with body literature rather than anchored conventions (Vardi, 2012). Learning intertextuality, this community contributed to giving fundamental skills and aspects for pre-service teachers as preparing for graduation paper by acknowledging pre-service teachers about 1) navigating and connecting literature review, 2) promoting various methodologies

(Badenhorst, 2017), 3) using direct and indirect quotations, and 4) reporting previous studies to give credit and evidence (Guo et al., 2022; Hu & Shen, 2021). Moreover, this study added teacher-mentor and teacher-teacher interactions essential to building intertextuality because prior studies suggested three areas of teachers' development: intertextuality, engagement with various sources, and contextual mediation (Badenhorst, 2017; Fajaryani et al., 2021; Valdivia & Martínez, 2018).

CONCLUSION

This study reports on pre-service teachers' practices and beliefs. In practice, it shows that pre-service teachers need more time to engage with academic essay discourse which is repeated from higher use of reporting phrases (n= 32) to provide evidence of their argumentative essay. However, less use of iconic references (n=10) shows that some pre-service teachers find it challenging to offer their expertise to local or national knowledge to tailor to international issues. Moreover, to support their reporting phrases, pre-service teachers tended to use whole text (n= 9), generic communicative act type (n= 4), quotation parts of the text (n= 2), and generic text type (n= 1). To express their expertise in one of the research areas, they used ambiguity (n= 7), but it was low. Although their beliefs showed that AI feedback facilitated their focus on their arguments and quotations, leading to decreased worry about writing errors on accuracy, using various intertextuality in argumentative writing could not be magically achieved with AI support. We argue that writing argumentative essays cannot be achieved using only generative AI; it requires high-quality feedback to elevate students' intertextuality. Moreover, this study shows that students build initial awareness of AI literacy during this study, although it requires in-depth investigation.

The praxis implication of this study contributes to Farrelly's (2020) intertextual reference-type implementation that can be fostered by integrating writing classes assisted by AI, so pre-service teachers can focus on critical engagement with literature review. To connect students with various discourses in a body of literature, our study recommends 1) building critical reading, 2) familiarizing them with mind mapping of body literature, and 3) practicing summarizing, paraphrasing, synthesizing, and arguing. Therefore, they not only report similarly to "reporters," but they also know how to voice their arguments

and to locate their study in the body of literature. Therefore, at the end of the day, we expect that pre-service teachers will build their capacity to criticize or rebut based on the existing literature or policy.

Regarding the policy implication of this study in higher education, although this study's early responses to the Indonesian government's policy of making "graduation paper and publication" optional, this study showed that the regulation of academic writing for publication classes needs to be reformed in the higher education curriculum. This study indicated pre-service teachers' insufficient intertextuality skills or early stages to engage with academic discourses, requiring more time to develop AI literacy in responding to the AI-raising era. This study suggests policymakers and faculty members should carefully design academic writing for publication classes with a single national framework. Therefore, although pre-service teachers did not need to write graduation papers or choose other optional requirements, they still engaged with academic writing or argumentative essays as the language of academia, and AI was adequately utilized and ethically regulated.

This study was limited to only a two-month study and a small sample of pre-service teachers, so it was defined in terms of the transferability and generalizability of this study. However, this study generally still represented the voices of EFL pre-service teachers who were challenged as EFL teachers to write argumentative essays for the first time. Therefore, future research can elaborate with more participants from non-English departments or experienced writers.

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