EFL STUDENTS' PERCEPTIONS AND PRACTICES OF USING ARTIFICIAL INTELLIGENCE (AI) IN WRITING THESIS PROPOSAL

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ABSTRACT

The use of AI in education is becoming increasingly widespread, particularly for thesis proposal writing. This study explores EFL students' perceptions and practices regarding AI assistance in thesis proposal writing. Using basic interpretive methods, semi-structured interviews were conducted with 10 EFL students. The research findings revealed mixed perceptions: positive and negative. Practices were categorized into selecting appropriate AI tools, integrating AI into the proposal, manually reviewing AI output, and recognising AI limitations. Future research should focus on the role of AI in the entire thesis writing process and its impact on students' critical thinking skills.

Keywords: EFL, Perceptions, Practices, Artificial Intelligence (AI), Thesis Proposal

INTRODUCTION

In the last decade, there has been increasing interest in the application of Artificial Intelligence in various fields, especially education. Artificial Intelligence (AI) is a computing system capable of engaging in human-like processes such as learning, adaptation, synthesis, self-correction, and use of data for complex processing tasks (Popenici & Kerr 2017). Crompton and Burke (2023) stated that there was a two- to three-fold increase in AI journal publications in education from 2021 to 2022. Research by Pilco and Yang (2022) shows that AI applications in Latin American higher education help address educational issues and ensure the quality of education.

In English education, AI assists in writing, making tasks such as essay writing and thesis proposals easier (Cummings et al., 2024). Students use AI to brainstorm, draft, and revise texts (Schwenke 2023). AI tools also provide immediate feedback on grammar and vocabulary (Zulfa et al., 2023). Studies show positive student perceptions of AI-based writing tools (Dong & Shi 2021; Koltovskaia, 2020; O'Neill & Russell, 2019). However, concerns about AI replacing human jobs and creating social inequalities remain (Keles & Aydin, 2021; Jeffrey, 2020).

AI can cause dependency and reduce critical thinking (Seo et al., 2021; Warschauer et al., 2023). The problem of plagiarism detection with AI output also requires human supervision (Peres et al., 2023). In response, a university in Surabaya developed a policy that emphasizes the ethical use of AI in thesis writing to support, not replace, the skills of researchers.

Although some research has been conducted on the use of AI in academic writing, there is a lack of research that focuses on EFL students' perceptions and practices in using AI for thesis proposal writing in the Indonesian educational context. This gap highlights the need for further research to explore how AI can be effectively integrated into the thesis proposal. Therefore, the researchers formulated two research questions to consider: 1) What are students' perceptions of using AI in writing thesis proposals? 2) What are students' practices of using AI in writing thesis proposals?

METHODS

This study used a qualitative method with a basic interpretative approach. Ary et al., (2009) define basic interpretive studies as research that provides a descriptive picture to understand a phenomenon, process, or certain point of view. This study involved 10 English Education students from cohort 2020 at one of the public universities in Surabaya, who were selected through a convenience sampling method because they often used AI in writing thesis

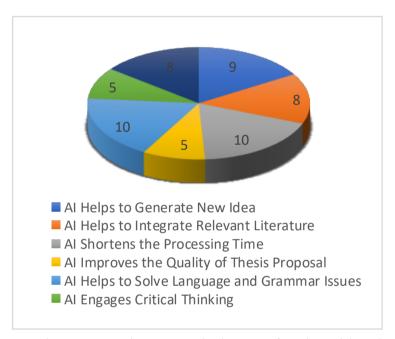
proposals. To answer all questions in the research questions, the researcher used a semi-structured interview instrument.

In this study, the researcher formulated the research questions, after that, the researcher created 18 interview questions to answer the research questions. The next step was the researcher looked for 10 EFL students who were willing to be interviewed and interviewed them one by one according to their schedule through Google Meet. During the interview, the researcher recorded the interview activities and after that, the researcher made a transcript of the interview that had been conducted. The last step was the researcher analyzing the data thematically.

RESULT AND DISCUSSION

EFL Students Perception on the Use of AI in Writing Thesis Proposal

Table 4.1 Results of Students' Perceptions of AI in Writing Thesis Proposal



To answer students' perceptions towards the use of AI in writing thesis proposals, the researchers categorized perceptions into two categories: positive and negative perceptions.

Positive Perceptions

AI Shortens the Processing Time

All students agreed that AI significantly reduced the time required for thesis proposal tasks such as literature search, paraphrasing, and grammar correction. Testimonials highlighted AI's positive impact on their workflow, noting its role in speeding up the research process and increasing overall efficiency.

S1, Excerpt 5

I absolutely believe, AI has given me everything I need without the need to look at the internet website and I only need to replace the words from the AI output. For paraphrasing, I also use AI Quilbot, which saves me a lot of time.

In this excerpt, student 1 fully believes in AI's ability to help them complete their thesis proposal faster. With the help of AI, students no longer need to visit various websites to search for information. The output of AI can be used directly with a slight modification of the wording, showing how easy it is to use the results provided by AI. Students used another AI tool,

QuillBot, for paraphrasing, which also saved a lot of time. Overall, the use of AI made the writer's work process faster and more efficient.

Students unanimously agreed on AI's time-saving benefits, which simplify tasks like literature searches, paraphrasing, and grammar corrections. AI tools like Quillbot and Grammarly are praised for reducing manual work, allowing students to focus on refining their ideas and arguments. This aligns with research by Imran and Almusharraf (2023), highlighting AI's role in enhancing research and writing efficiency.

AI Solves Language and Grammar Problems

All ten students had confidence that AI could help with language and grammar errors. However, there was one student who had a small concern in this regard. AI such as Grammarly and Quillbot do provide benefits related to language and grammar problems, but they do not always provide the right solution. There are times when AI still requires human supervision to ensure accuracy and correctness in its use. This student's concern is not entirely unwarranted, given that while AI has come a long way in helping with things like language and grammar, there are still limitations and possible errors that can occur.

S6, Excerpt 98

This I'm 80% sure of. The 20% I'm not sure because if I use Grammarly or Quillbot, there's too much autocorrect. Quillbot also doesn't correct it but it corrects the words that I think are not connected.

In excerpt 98, student 6 stated that she had doubts about Grammarly and Quillbot. Although Grammarly and Quillbot could help improve some aspects of his writing, there were concerns regarding the overload of autocorrect that could inappropriately change the structure or meaning of sentences.

All students recognized AI's effectiveness in addressing language and grammar issues. The results of this study are consistent with previous research findings showing that AI can make a significant contribution to improving students' writing accuracy, as noted by Lund and Wang (2023), as well as improving grammar, as evidenced in the study of Ghali et al., (2018). Tools like Grammarly quickly detect and correct errors, improving the readability and quality of writing. However, human supervision remains crucial to ensure accuracy and appropriateness, as AI corrections may not always align with the author's intended meaning.

AI Generates New Ideas

Nine out of ten students appreciated the role of AI in helping them overcome writing obstacles, especially when they did not have an initial idea for their thesis. All nine participants believed that AI can help with generating new ideas. AI can compile a list of relevant ideas based on certain keywords or themes, so users can quickly evaluate various options and choose the ones that best suit their needs. This efficiency is especially beneficial in situations where time is a critical factor, such as in academic writing.

S3, Excerpt 38

AI is very helpful in generating ideas for writing thesis proposals. ChatGPT can inspire me by offering various relevant research topics based on the latest trends in my field of study. In addition, AI can help outline and provide feedback on relevant literature, so that I can start with a strong foundation.

Student 3 in excerpt 38 assumes that AI is very useful in the thesis proposal writing process because AI can provide ideas based on the latest trends and help in preparing a literature analysis framework so that researchers can start to write a thesis proposal with a strong foundation and good structure.

Some students valued AI's ability to generate new ideas by processing vast amounts of information and providing relevant suggestions. AI platforms like ChatGPT help students access various ideas related to their research topics, although true innovation often stems from human insights and experiences. This perspective is supported by research from Kasneci et al. (2023) and Taecharungroj (2023).

AI Integrates Relevant Literature

Eight out of ten students recognized that AI could help integrate relevant literature into their thesis proposal more efficiently and effectively. This indicates an increased trust in technology to assist the academic research process. The technology is perceived to speed up the process of analyzing and synthesizing vast amounts of information, which can be time-consuming if done manually. However, two other students still had concerns about the possible errors that AI might produce.

S9, Excerpt 148

No, because it's incoherent, you have to search again. The source is not valid.

Excerpt 148 shows that student 9 considered that AI could not integrate relevant literature into the thesis proposal. The reason for this is that the results produced by AI are unclear and inconsistent and therefore do not meet the criteria of desirable literature. Student 9 also emphasized that the sources of information used were not valid or reliable. This could mean that the sources did not meet the necessary standards of accuracy, reliability or relevance.

Most respondents found AI tools like Perplexity and Google Scholar useful for streamlining the literature search process, despite occasional limitations in delivering satisfactory results. This is similar to research by Grigas et al., (2017) which revealed that most PhD students use Google and Google Scholar to find relevant journal sources. AI's ability to analyze numerous articles and suggest relevant sources enhances the research process, although human validation remains essential to ensure accuracy.

Improves Quality of Thesis Proposal

Half of the students doubted AI's ability to improve thesis proposals, citing concerns about accuracy and authenticity. However, four students saw potential benefits like literature access, grammar correction, and new ideas. One student remained sceptical.

S2, Excerpt 24

Maybe it can, usually our research is much better because the references used are international journals and AI can support finding relevant journals that have rank.

Student 2 in excerpt 24 expressed the perception that AI might be able to improve the quality of her thesis proposal writing. She stated that her research was of better quality because she used references from international journals. In addition, the author believes that AI can support finding relevant and highly ranked journals. Thus, student 2 thought that the use of AI in the search and research process could help improve the quality of her thesis proposal writing. This reflects the student's optimism towards the role of AI in supporting academic research and the thesis writing process.

Half of the students believed AI could enhance the quality of their thesis proposals by providing efficient access to literature, assisting in grammar correction, and sparking new ideas. According to Fitria (2021), Grammarly as a writing aid can improve the quality of student writing. However, some doubted the accuracy and authenticity of AI-generated content, emphasizing the need for human critical thinking to ensure research integrity.

Fosters Critical Thinking Engagement

Five out of ten students believe AI can improve their critical thinking skills, while the other five doubt its ability to develop critical thinking skills. Some argue that AI fosters laziness and reduces the human ability to think independently, while others argue that AI encourages deeper reflection and inquiry. Despite these differing views, it is clear that the impact of AI on critical thinking is multifaceted and requires careful consideration.

S7, Excerpt 118

I don't think critical thinking has any relationship with AI because AI helps to make things easier, I think we get critical thinking from real-life experiences, for example when we are in college we are asked to think critically a lot. If AI helps critical thinking, I don't think so.

In Excerpt 118, student 7 expresses scepticism regarding the relationship between AI and critical thinking. He argues that critical thinking is primarily developed through real-life experiences, particularly in academic environments such as college, where students are consistently challenged to think critically. Student 7 believes that the primary function of AI is to simplify tasks, not foster critical thinking. He argued that if AI contributes to critical thinking, its influence will be very small compared to the depth of critical thinking developed through direct engagement with real-world situations and academic challenges. Therefore, student 7 remains unconvinced that AI can improve critical thinking ability.

Some students argued that interacting with AI-generated content stimulated deeper inquiry and reflection, while others feared it might lead to dependency and reduced independent thinking. AI fosters students' confidence, open-mindedness, and maturity in English, which can help them improve their critical thinking skills (Muthmainnah, 2022). This highlights the need for a balanced integration of AI in educational contexts.

Negative Perceptions Relies Heavily on AI

Eight out of ten students relied heavily on AI in writing the thesis proposal. This indicates that all eight students were highly dependent on AI and had difficulty if they had to write a thesis proposal without the help of AI. This dependency was caused by several factors, such as the lack of academic writing skills and limited time.

S6, Excerpt 101

I relied on AI very, very much and it seems like I'm very very dependent on AI. When I used AI, I was more optimistic If I wanted to submit my thesis proposal to the lecturer. My words have been corrected by Grammarly, my ideas have been helped by ChatGPT, and then maybe my words that were originally just basic English became formal English because of Quillbot.

Excerpt 101 shows that student 6 felt AI technology had become an integral part of his writing process, providing support in various aspects from language correction to idea development and text formality enhancement. While this demonstrates efficiency and improved quality in writing, student 6 also expressed a deep dependence on technology that could detract from an individual's ability to develop independent writing skills.

Concerns were raised about students' heavy reliance on AI, with eight out of ten admitting significant dependence on the technology. This result is in line with research by Bounzar et al., (2024) that AI users should be warned about over-reliance on AI. While AI's efficiency was appreciated, there were fears about its potential long-term impact on language development and critical thinking skills. Students emphasized the importance of balancing AI assistance with human input to maintain creativity and independent research capabilities.

Practice of Using AI in Writing Thesis Proposals

The students reported that they integrated AI tools into their thesis proposal writing process, especially for generating ideas and checking grammar. This is in line with Salvagno's (2023) findings on the use of AI in scientific writing for organizing material, drafting, and proofreading. Students' specific practices in using AI for their thesis proposals are detailed below:

Choosing the Appropriate AI Tool

The result of the interview shows that the first step that all students take is choosing the appropriate AI tools that suit them. Overall, the AI tools used by students are Perplexity, ChatGPT, Grammarly, Quillbot, DeepL, Mendeley, Google Scholar, Google Translate and Turnitin. However, the AI tools most frequently used by all students are Grammarly and Turnitin.

S4, Excerpt 65

ChatGPT, Grammarly, Google Translate, Google Scholar, Mendeley, Turnitin.

In excerpt 65, student 2 explains that he used the AI tools ChatGPT, Grammarly, Google Translate, Google Scholar, Mendeley, and Turnitin to help him write his thesis proposal. Google Translate is an AI-based translation tool while Mendeley is a reference management tool to easily reference sources.

Research by Wulandari et al., (2024) revealed that teachers can also utilize similar tools to improve their writing skills. This preference highlights the importance of grammar checking and plagiarism detection in academic writing. Each student tailored their choice of tools based on specific needs, showcasing a diverse and strategic use of available technologies.

Integrating AI into the Writing Thesis Proposal

The next step taken by all students in this study was to integrate AI into their research proposals. The interview results show that all students integrated AI in writing chapters 1, 2, and 3, which are all chapters required for the research proposal. All students then searched for relevant literature on Google Scholar and Perplexity. After that, students started writing their thesis proposal in English with the help of Google Translate or DeepL. Then, seven out of ten students used Quillbot AI to paraphrase sentences, while the other three paraphrased without AI assistance. Next, all students used Grammarly to solve grammar errors. The last step taken by all students was uploading their thesis proposal to Turnitin to check the percentage of plagiarism.

S1, Excerpt 14

I used AI Perplexity to find ideas about my topic. I used ChatGPT to help me compose the words. I used Google Scholar to find journals related to my topic. I translate it using DeepL and I paraphrase using Quillbot. Then, I used Grammarly to correct grammar errors. After chapters 1 to 3 are finished, I use Turnitin to check the percentage of plagiarism.

Student 1 explained their process of using AI to help write their thesis proposal. They used Perplexity to generate new ideas and ChatGPT to organize sentences to make them coherent. Google Scholar helped find relevant journals and literature, while DeepL translated foreign sources. Quillbot was used to rewrite the translated text to avoid plagiarism, and Grammarly checked for grammatical errors. Finally, Turnitin ensures the originality of their work by checking for plagiarism.

All students used AI to help with chapters 1, 2, and 3 of their thesis proposals. They started by generating ideas using ChatGPT and Perplexity, then searched for relevant literature with Google Scholar and Perplexity. Google Translate or DeepL helps those who lack

confidence in English. Quillbot is used to paraphrase, and Grammarly corrects grammatical errors. As mentioned by Chen (2023), AI provides quick proofreading and editing feedback. Finally, Turnitin checks for plagiarism. This process demonstrates a systematic approach to integrating AI into academic writing.

Manual Review of AI's Output

Although all students used AI in their thesis proposals, this study revealed important findings. The students emphasized the importance of respecting copyright and citing sources correctly. They noted that they did not always accept the suggestions from Quillbot and Grammarly, as they were sometimes inappropriate. Students emphasized the need for manual proofreading and revision to ensure accuracy and quality. They felt the need to double-check AI corrections, which shows a critical approach to using technology in academic writing.

S2, Excerpt 33

I check the grammar using Grammarly. But I don't 100% accept the suggestions from Quillbot and Grammarly, because I think sometimes they don't fit.

Student 2 highlighted that while tools like Grammarly and Quillbot are useful for checking grammar and writing, their suggestions are not always contextually appropriate. Writers should use critical judgment when considering these suggestions. While these tools help correct errors, the final decision should depend on a personal understanding of the context and writing style.

Students appreciated AI tools like ChatGPT for editing but emphasized the need for human supervision (Atlas, 2023). They emphasize proper citation and avoid blindly accepting suggestions from Quillbot and Grammarly, to ensure accuracy. Manual proofreading maintains the quality of the work, reflecting a balanced approach to AI and human input for academic integrity.

The role of the human being in this context is that of the supervisor. While AI tools can improve some aspects of thesis writing by providing efficiency and technical support, they cannot replace the complex role of the supervisor in terms of guidance, expertise, ethical oversight, critical engagement, contextual understanding, and the moral support response provided by the supervisor is critical to ensuring the quality, integrity, and academic rigour of the proposal itself.

The Limitations of AI

The students highlighted some of the limitations of AI in this study. The AI requires a fast internet connection to function; without an internet connection, the AI cannot operate. The lack of expert references raised concerns about the accuracy of the information. The AI often produced repetitive output despite keyword variations, hindering new insights. Irrelevant suggestions lead to repetitive rewriting, causing a waste of time. Vague keywords give vague results. Paraphrasing features limit the number of words unless scaled up. AI database limitations generate questions for clarification. The language can be overly redundant and highly artificial. Lastly, AI can misinterpret user intent without specific keywords.

S8, Excerpt 134

The database is not extensive enough, and sometimes AI asks us back (ChatGPT). Like "Sorry I don't know what you mean"

This excerpt shows the limitations of the databases used by AI, which sometimes cause AIs like ChatGPT to be unable to understand or answer user questions appropriately. When the data held by the AI does not include the required information, the AI may respond with phrases such as "Sorry, I don't know what you mean." This highlights the importance of data

completeness and quality in AI systems, as well as the challenges faced when the required information is not available. Therefore, while AI can be a very useful tool, there are still limitations that need to be addressed to improve its ability to understand and respond more accurately to user queries.

The students noted several limitations of AI that affected its effectiveness. Issues included the need for a fast internet connection, lack of expert references compromising the reliability of the information (Fyfe, 2022), repetitive results, and irrelevant suggestions requiring multiple repetitions. The word count limit on free paraphrasing is a challenge, prompting consideration of premium options. AI language can be too formal or generic, losing nuanced meaning. These limitations underscore AI's role as a complement, not a replacement, for traditional research and writing methods.

In conclusion, EFL students' use of AI to write thesis proposals demonstrates a careful integration of technology, enhancing their work while maintaining a critical attitude towards the limitations of AI. This balanced approach underscores the need for supervisory oversight to ensure quality. Going forward, AI will likely provide significant benefits to pre-service teacher education by offering personalized learning experiences, assisting in the development of lesson plans, and providing analytics to improve teaching strategies. While AI will not replace the human element in teaching, its integration promises to improve the effectiveness and efficiency of teacher preparation, leading to better educational outcomes.

CONCLUSION

In this study, the researcher focused on EFL students' perceptions and practices in subject thesis proposal writing. The limitation of this research is the small sample size; the researcher only used 10 EFL students who had used AI in thesis proposal writing at one of the state universities in Surabaya. The method in this research is qualitative, so the researcher only needs a few participants. Therefore, these few participants can differentiate the findings. The integration of AI in thesis proposal writing received mixed perceptions from students. They appreciated AI's benefits in saving time, enhancing language and grammar, and reducing workload, particularly for literature searches and error correction. However, they expressed concerns about over-reliance on AI potentially impeding the development of basic language skills and critical thinking. Despite AI's efficiency in generating ideas and speeding up the literature search process, some students questioned the accuracy and validity of AI-generated content, emphasizing the necessity of thesis supervisor oversight to align with desired writing styles and purposes. Students utilized various AI tools for idea generation, grammar checking, and plagiarism detection, but stressed the importance of manual review to ensure quality and accuracy. Limitations such as the need for fast internet, lack of expert references, and overly formal language were noted, suggesting AI should complement rather than replace traditional methods. The study underscores the potential of AI to enhance academic writing while highlighting the need for a balanced approach that leverages AI's capabilities and acknowledges its limitations.

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