

ESP STUDENTS' PERCEPTIONS OF AI WRITING TOOLS TO ENHANCE STUDENTS' SELF-EFFICACY IN WRITING SKILLS

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ABSTRACT

This study aimed to explain ESP (English for Specific Purposes) students' perception of AI Writing Tools to enhance their self-efficacy in writing skill by examining its impact on students' learning experiences and perceptions. The present investigation employed a qualitative case study. The data collected by open-ended questionnaire in online form distributed to the 2nd of ESP student in engineering programs of Malikussaleh University (UNIMAL) by using the purposive sampling technique. The data show that 78.5 % respondents use AIWTs frequently and 21.5% less frequently. Chat GPT was the most commonly used with 60.5% is chosen by student. Grammarly was the second most popular in this survey with 24.5%, quillbot with 6.5% still not familiar to student, and other AIWTs such as copy.ai, perplexcity.ai, and AI summarizer is chosen by respondent with 8.5%. The students felt that AI improved their motivation, offered interactive learning, decreased their anxiety, and provided easy for them to receive prompt feedback on their writing. These benefits allowed the students to concentrate on developing positive attitudes that would enable them to consistently improve their writing skills and succeed in all of their English writing tasks.

Keyword: ESP Student, AI Writing Tools, Self-Efficacy

1). INTRODUCTION

Artificial Intelligence (AI) integration has become a disruptive factor in many different fields. Education is one area where AI has a significant impact. Utilizing artificial intelligence (AI) technology, both within and outside of the classroom, can help achieve learning objectives include supporting different learning phases of difficulty and improving learners' accomplishment. (Moulieswaran & Prasantha, 2023). The possibility exists for Artificial Intelligence (AI) to replace traditional teaching methods, as developments in this area are starting to show. As AI becomes more prevalent in EFL classrooms, it's crucial to consider how students will react to this development while integrating AI-powered resources. AI provides various learning materials and approaches for teaching and learning English, particularly for ESP students. English for Specific Purposes (ESP) is an important centerpiece. ESP requires English proficiency that is specific to their field of study or workplace, which calls for a focused and effective teaching strategy.

ESP students now frequently use Artificial Intelligence Writing Tools (AIWTs). AIWTs can be used to generate scientific papers automatically, as well as for plagiarism check and grammar check. A fresh generation of writing tools has arisen to help users with the writing process as artificial intelligence (AI) technologies have grown in popularity. (Marzuki, Widiati, Rusdin, Darwin, & Indrawati, 2023). Most of studies mentioned that students' writing abilities can be enhanced by using AI-powered writing tools. (Kurniati & Fithriani, 2022; Syahnaz & Fithriani, 2023; Zhao, 2023).

In the domains of digital innovation and educational technology, AIWTs have surfaced as a cutting-edge solution that seeks to revolutionize the analysis and processing of textual content. The general goal of AIWTs is to evaluate written documents in terms of sentence structure, grammar, vocabulary, syntax, and content. (Hosseini, Rasmussen, & Resnik, 2023; Thorp, 2023). AI writing tools simplify the writing process and save time and effort for teachers and students, which is a major benefit of this revolutionary technology. Moreover, it also can be accessible to a broad audience because of their user-friendly interfaces. (Chang, Li, Huang, & Whitfield, 2021).

Students' responses regarding their acceptance of AI-powered tools have shown to be a crucial sign of how well the integration of these tools has gone into their English proficiency. (Syahnaz & Fithriani, 2023). The main issue in the classroom revealed that ESP students were still unaware of their obligation to write correctly and grammatically in English texts. In addition, it is possible that most students are not adept at using AI-powered tools, which can make it difficult for them to make the most of these resources. moreover, when it comes to AI systems, they lack knowledge with the technology.

The aspects mentioned above have a significant impact on students' self-efficacy in the classroom. According to Ghufron and Risnawita (2014), self-efficacy is one of the knowledge aspects about oneself or self-knowledge that has the greatest influence on people's daily lives because it influences people's decisions about the actions to be taken in order to achieve a goal, including the consideration of various events that will be faced. In other hand, Self-efficacy was described by Bandura (1997) as an individual's belief in their own ability to use their skills to accomplish a given task.

Regarding the highlight, the researcher discovers that ESP students' challenge is to figure out how to get beyond the obstacles in using AIWTs to improve their writing skill. Considering this, ESP students must be able to utilize the resources available to them to learn how AIWTs affects their sense of self-efficacy while writing in English and how it may inspire innovative writing skill. By conducting the study, the researcher defines how ESP students perceptions toward AIWTs to increase students' self-efficacy in writing skills.

2). METHODS

The design of study is a qualitative case study which the data provided to explain students' perception. According to Yin (2018), case studies can give researchers the chance to use data sources to investigate and specify phenomena in context. In addition, Miles and Huberman (1994), interviews, records, and artifacts are the main sources of verbal data that participants provide for collection and analysis. The issues that have been discovered in the class can be thoroughly examined by employing qualitative case studies since these methods offer detailed information that can be used to analyze the data and produce a final report.

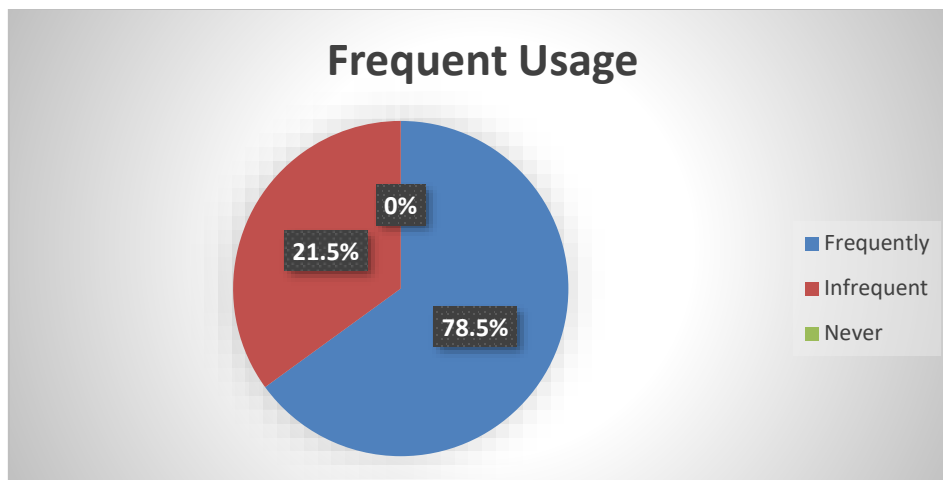
The research study is presented to clarify how ESP students view of AIWTs for enhancing their self-efficacy in writing skill. It consists of the 2nd semester of ESP student in engineering programs of Malikussaleh University (UNIMAL) by using the purposive sampling technique. Open-ended questionnaires were used in this study as data collection method. Students can respond to lists of structured questions with free-form thoughts, opinions, and insights. It can be used to get feedback from students regarding how they perceive AIWTs in increasing their self-efficacy in writing skill. Google Forms were used to collect all of the data in this study.

3). RESULTS AND DISCUSSION

The finding and discussion presented the data from analysis of open-ended questionnaire responses. It prompts to clarify how ESP students view AIWTs to increase their self-efficacy in writing.

The Usage of Frequency AIWTs Among Students

Based on questionnaire related how ESP students use artificial intelligence writing tools, or AIWTs, the fact that 78.5% of ESP students actively and routinely use AIWTs during the writing process shows how well accepted they are. Because AIWTs are used so frequently, it is likely that they are beneficial in helping students produce high-quality content and reinforce writing activities.

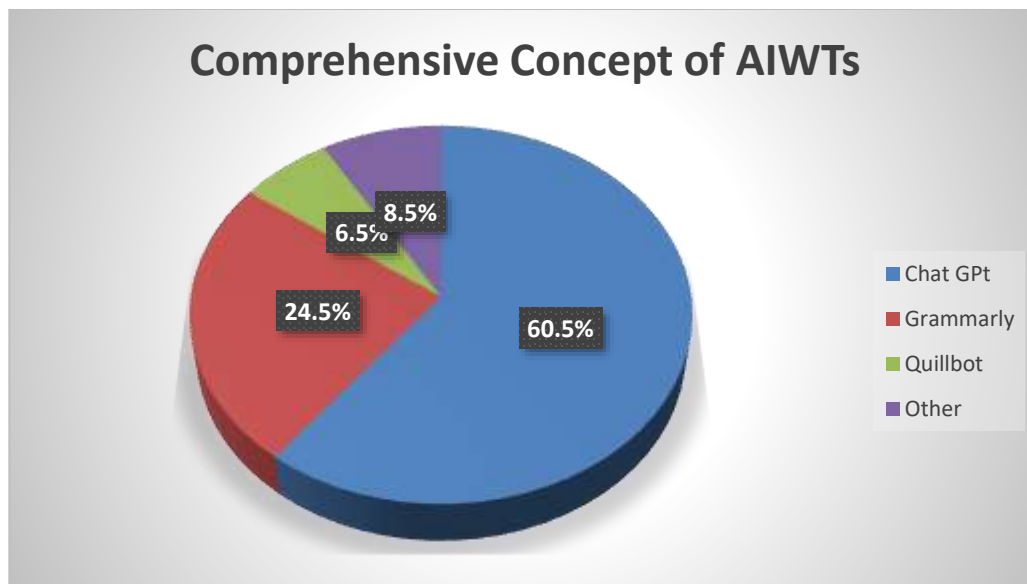


Graphic 1. The Usage of Frequency AIWTs Among Students

Nevertheless, over 21.5% of the respondents use AIWTs less frequently. However, these figures still show that students accept and use this technology, although not as often as most students. There were no respondents who had never used AIWTs, indicating that this technology has become part of ESP students' overall writing lives. The fact that no respondent has never used an AIWTs. it is indicated that ESP students now use this technology for writing regularly. This also clarifies how technology may improve education by providing students the tools and resources that can make their learning more effective and efficient, which then proves the development of artificial intelligence (AI) technology in the context of education, where the emergence of AIWTs has provided important support for users in improving and developing their writing skill (Coenen, Davis, Ippolito, Reif, & Yuan, 2021). Overall, these results imply that AIWTs, both when actively utilized and when used less frequently, have a significant role in assisting ESP students' writing processes.

Comprehensive Concept of AIWTs Among ESP Students

The Artificial Intelligence Writing Tools (AIWTs) that ESP students utilize are thoroughly examined in this large study. To help students write better, researchers and educators who investigate the subject of writing have developed several artificial intelligence-enabled applications. These AIWTs include intelligent writing assistants, instructional chatbots, and automatic automated writing evaluation systems to enhance student's writing skill. (Woo, Susanto, Yeung, Guo, & ..., 2023). The findings show a variety of conclusions among the ESP students surveyed.



Graphic 2. Comprehensive Concept of AIWTs Among Students

Based on the graphic above, Chat GPT was the most commonly used AIWTs with 60.5% is chosen by respondents. Grammarly was the second most popular in this survey with 24.5%, followed by quillbot with 6.5%, and other AIWTs such as as copy.ai, perplexcity.ai, and AI summarizer is chosen by respondent with 8.5%

Students' Perceptions of AIWTs to Enhance Self-Efficacy in Writing Skills

In collecting the data regarding students' perceptions, the researcher used open-ended questionnaire. The researcher creates a few questions based on their perceptions in order to increase the students' self-efficacy in writing skills. The survey responses showed that every student positively views AIWTs to increase self-efficacy concerning their writing skills. The students were asked about their comprehension of AIWTs. The following were the outstanding answers:

AI is a computer program designed to answer questions and simplify the user's job (Student 1)

AI is a tool in that I can use to make my task easier (Student 2)

AI is a field of computer science devoted to solving problems commonly associated with human intelligence such as learning in order complete my assignment easier (student 3)

AI is a tool that help me to finishing my task better (student 4)

Based on their responses, the students believe AI to be a tool that makes their work easier. Artificial Intelligence has several uses, depending on the situation, and is a technological advancement. Additionally, AI provides students with lots of ideas for completing their assignments. so that the use of AI is accepted well by students.

After getting student responses related AI, the researcher asks about how students use AI Writing Tools (AIWTs) in writing aspect. The following were the outstanding answers:

The student responses involve opinions diversity regarding exact impact on utilizing AIWTs. Student 1 indicated that AIWTs had a positive effect by helping in the cohesiveness of ideas through the use of significant transition words and phrases. Furthermore, AIWTs provided instant feedback, which enabled him to add clear transitional elements, enhancing the structure and coherence of his writing. Student 3 also highlighted how AIWTs may expedite and enhance the effectiveness of the task-writing process. In general, he verified that AIWTs improved aspects of efficiency and quality.

AIWTs had a positive effect on my writing as an ESP student. With the use of effective transition words and phrases, AIWTs enabled me to connect the ideas in my writing logically. I can more quickly and effectively arrange my assignments because of AIWTs. (student 1)

Student 2 emphasized the positive aspects of AIWTs, particularly concerning lexical diversity. She states that AIWTs offer a large range of language substitutes that can be utilized in writing, allowing for the structured content and varied language equivalents of writing. AIWTs also assist students in developing more familiarity with English skills, particularly writing skills.

AIWTs have a big impact on my writing since they improve lexical diversity and enhance my vocabulary through diverse word choices. thereby significantly increasing writing output (student 2)

Student 2 realized various benefits AIWTs offer in supporting her writing. She claimed that AIWTs improved her writing in several aspects. Sentences flow more naturally, and the writing reveals coherence since the links between ideas become clear.

Student 2 and 3 had similar opinions about AIWTs, which provide a variety of language suggestions for writing. Nonetheless, the two have different viewpoints. In contrast to student 3, who argues that AIWTs sometimes do not match the context of the writing and make it unclear, student 2 argues that AIWTs are simple to comprehend in context and can offer suggestions for good writing. This shows that the two have very different opinions from one another.

AIWTs improve writing and vocabulary while maintaining a consistent flow of ideas between paragraphs. But, in order to improve my writing, I must manually modify any sentences that don't match the context after double-checking the results. (student 3)

Student 4 discussed the advantages and disadvantages of utilizing AIWTs in his concluding remarks. He highlighted the benefits of AIWTs, pointing out that he can enhance the content of his writing by comprehending the theme's context and offering relevant text recommendations.

Nevertheless, student 4 also expressed concern over the potential for reliance on AIWTs to lower literary inventiveness. He highlighted the need to make the best use of this technology without sacrificing the creative element and originality of the writing process since he believes that the flexibility to think creatively is still crucial to produce high-quality work.

AIWTs help me write better by recommending sentences that make sense in the given context. However, if AIWTs help understand problems and provide different options, relying too much on them raises concerns about decreased creativity. (student 4)

Different viewpoints on how using AIWTs has affected the writing of ESP students 1,2,3, and 4 were shown by the results of their interviews. Student 1 emphasized how using AIWTs might improve writing and organizing efficiency, student 2 argued regarding level of language skills increased, student 3 agreed with the benefits but pointed attention to the inappropriateness of AIWTs in terms of providing writing that is suitable for the writing context, and student 4 noted that the linguistic content had improved, but they were also concerned about potential barriers to innovation.

In addition, to find out the students' level of self-efficacy, the students were asked about their comprehension related self-efficacy. The following were the outstanding answers:

Self-efficacy is a person's belief in their ability to produce something (student 1)

Self-efficacy is one's belief in their ability to plan tasks and accomplish goals (student 2)

Self-efficacy is a person evaluation of his or her ability or competence to perform a task, achieve a goal, or overcome an obstacle (student 3)

Self-efficacy is a concept of knowledge related to the level of strength of an individual's belief of expectations regarding his skills (student 4)

Based on their responses, the students deduce that self-efficacy is associated with people's belief in their capability to plan, complete a task, reach a goal, or create something to develop a certain ability. Hence, the students aware that self-efficacy linked to each person's ability to complete tasks and related to their learning environment.

After knowing how students define AIWTs and self-efficacy. The last questions were asked related to student perceptions of AIWTs to enhance students' self-efficacy in writing skills. The following were the outstanding answers:

AI has an impact on my confidence in finishing English writing assignments, for sure. There are a lot of sources and pieces of information offered, therefore I do have a lot of ideas. (student 1)

It was my first times using AI to finish English writing projects. When the lecturer asked me to use AI as a tool to identify references for my writing, I was really excited and confident in my final result. (student 2)

AI impacts my writing mood since it provides me with a wealth of information through studies. As a result, when I write in English, I feel satisfied that my task is completed. It also gave me more energy and self-confidence when writing in English. (student 3)

By using AI in writing, it is very helpful to find out the correct lexical and grammar. Therefore, when my lectures ask me to write I feel more confident to write English by combining my idea with AI, it is really help me to complete my task better (student 4)

Based on student responses, Nearly all students showed a positive perception of AIWTS to increase self-efficacy in writing skills, they believed that AIWTs has a significant influence in developing writing skills. Additionally, they feel more confident finishing the task because AI provides an extensive variety of sources and information that students may modify and combine into their own thoughts. ESP students think that AI is has the impact on self-efficacy to help them overcome their weaknesses. They have innovative ideas about how to improve their approach as they integrate AI technology into their learning experiences.

Regarding ESP student responses, the researcher provided a few points on the findings of students' perceptions of AIWTs in order to increase self-efficacy in writing Skills: (1) Encourage interactive learning; by utilizing AIWTs, the ESP students can increase their self-efficacy by combining their learning style with AI in order to focus on areas where they need to develop, be able to take chances when writing, and establish positive attitudes to achieve writing-related goals. (2) Increase student interest and decrease anxiety levels; according to the students, they were more interested to refine their concepts, arrange their work, and feel less anxious. AIWTs enables students to develop their sense of accomplishment and motivation in conventional writing by focusing on how their moods and emotions affect learning goals. AIWTs achievement increases students' self-efficacy, makes them more self-assured and inclined to believe in their own abilities, and customized to meet their needs. The students feel more confident to their own ability and finish the task completely based on their willingness (3) Easy access to obtain feedback; AI can detect writing faults, give prompt feedback on style, and provide immediate suggestions. AI assists students in developing greater knowledge of writing and in learning from their mistakes. It improves students' confidence and promotes positive behavior.

4). CONCLUSION

In summary, the investigation of how ESP students' views of AIWTs to enhance self-efficacy in writing skill show positive perception for educational enhancement. They felt that artificial intelligence (AI) had a significant impact on their writing skill and self-confidence. Based on questionnaire given to student, most of student actively and routinely use AIWTs in improving writing skill. The data show that 78.5 % respondents use frequently and 21.5% less frequently. Chat GPT was the most commonly used with 60.5% is chosen by student. Grammarly was the second most popular in this survey with 24.5%, quillbot with 6.5% still not familiar to student, and other AIWTs such as bing, copilot, gemini, perplex ai is chosen by respondent with 8.5%.

Additionally, the students felt that AI improved their motivation, offered interactive learning, decreased their anxiety, and provided easy for them to receive prompt feedback on their writing. These benefits allowed the students to concentrate on developing positive attitudes that would enable them to consistently improve their writing skills and succeed in all of their English writing tasks. By using AI Writing Tools, most ESP students were able to use the tools that help them in many aspects of writing, such as increasing their creativity and fixing their mistakes Yet it's crucial to maintain that focusing only on AIWTs might reduce writing inventiveness. Thus, a balanced approach to the usage of AIWTs in universities is crucial for ensuring that writing originality is not compromised.

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