Teaching Writing Skills by Using ChatGPT

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Abstract. The primary objective of this research is to measure the level of familiarity, and students' perceptions of the effectiveness of ChatGPT in writing skills. This study validates the usefulness of artificial intelligence (AI) in contemporary education by showcasing ChatGPT's effectiveness in solving typical writing difficulties. This encourages further research and analysis into the many applications of AI technologies in educational settings, opening up new opportunities for innovation and efficient teaching strategies. Teachers can use ChatGPT to make the learning process more interactive and engaging while encouraging active engagement from students. The researcher is focused on English Department students. ChatGPT can adjust its responses according to your input, creating a more personalized learning experience for your specific requirements and preferences, this research assesses students' familiarity with ChatGPT as a tool in their writing abilities by utilizing quantitative data gathered through questionnaires. The researcher records each participant's response to each question. Participants' answers will not be modified or guided to retain the research's authenticity. Data were obtained through a questionnaire and interview. Students from Banda Aceh's English department completed the questionnaire. The utilization of a mixed-method technique offered a full understanding of the research subject. From the research results obtained, ChatGPT is an effective tool for academic writing skills among university students. It helps various aspects of writing, from idea generation to grammar checking and final revisions.

Keywords: ChatGPT, teaching writing skills

1. Introduction

The increasing use of English in everyday life is inevitable. As a global language, English is widely used across many countries and plays a significant role in communication and knowledge acquisition. The rapid advancement of information and communication technology has further reinforced the importance of English as a primary means of accessing information and connecting with the world. English comprises four essential skills: reading, speaking, writing, and listening. Among these, writing is often considered particularly challenging. While it is an essential and beneficial aspect of language learning, many individuals struggle with various aspects of writing, including word choice, grammar, sentence structure, mechanics, and the organization of ideas. Despite these challenges, writing enables students to express their thoughts and creativity, even in guided activities where they have structured options. Common difficulties in writing include organizing ideas effectively, limited vocabulary that restricts expression, grammatical and punctuation errors that affect clarity, and the challenge of constructing strong, persuasive arguments. Developing writing skills is, therefore, an essential part of mastering English and enhancing overall language proficiency.

In the current digital era, a variety of technical innovations can be used to ease the writing challenges faced by students. The number of technical tools and technologies that can enhance language instruction and learning, particularly in writing, has increased. AI-

powered chatbots can change the competency level, offer individualized learning resources, and recommend specific learning routes if a student finds the input difficult (Kuhail et al., 2023). According to Huang et al. (2022), these chatbots can offer a variety of expressions, queries, and vocabulary that human language partners might not have access to. They can also help create a real-world, interactive learning environment (Chiu et al., 2023). Additionally, AI-powered chatbots can do formative evaluations and offer fast feedback, which are crucial elements of effective language acquisition (Huang et al., 2022; Kuhail et al., 2023). Chatbots engage language learners, develop their language skills, and support them in maintaining their motivation, according to earlier studies (Kohnke, 2023). Other benefits of chatbots include lowering language learners' perceived transactional distance from teachers (Kohnke, 2022a).

One of the most advanced AI-powered chatbots is ChatGPT, a significant AI innovation created by Open AI, that attracted 1 million users in just 5 days (Haque et al., 2022). ChatGPT, also known as "generative, pre-trained transformer," is a revolutionary innovation developed by OpenAI, a Microsoft-backed company, and scheduled for delivery in November 2022. This powerful technology improves the automatic speech recognition, natural language processing, and limited AI capabilities of digital assistants like Siri and Alexa, allowing it to do more complicated tasks. While Siri and Alexa rely on machine learning to deliver information and handle requests, ChatGPT takes these skills a step further by offering enhanced conversational capabilities and a broader variety of functionality. ChatGPT, on the other hand, is intended to participate in interactive dialogues with users. ChatGPT elevates the concept by delivering more natural and dynamic interactions. The astonishing capacity of ChatGPT to realistically simulate human interaction opens up a new and interesting option for language acquisition.

ChatGPT is a chatbot that can be used to help improve English language acquisition, particularly writing skills. ChatGPT has shown to be an excellent resource for language learners, providing a plethora of benefits for boosting English writing skills. Because of its capacity to replicate human speech, learners can participate in realistic and dynamic practice sessions while receiving immediate feedback and advice. According to earlier studies (Kohnke, 2023), chatbots have a significant impact on how language learners are engaged, how their language skills are developed, and how they keep motivation. This technology gives language learners new possibilities to enhance their writing skills, gain confidence, and then become more fluent in English.

There are some previous studies on this topic. Based on the results of Fitria (2023), a review of ChatGPT in writing English essays, by using this chatbot Users can save both time and effort by utilizing this chatbot to quickly access the information they require. Meanwhile, findings from the research conducted by Wahyuddin et al. (2023) Implementation of ChatGPT on English class essay writing skills in university students. With the results, the application of ChatGPT to essay writing skills in English classes for higher students is applicable and brings significant benefits. Based on Zebua & Katemba (2024), Students' perceptions of using the OpenAl ChatGPT application in improving writing skills. With the results of utilizing its capacity to generate responses based on user-entered keywords, ChatGPT has the potential to make a positive impact on the field of education and learning. However, it is critical to recognize that not all of these tools are advantageous to the development of specific student skills, such as creative writing ability.

Based on all these explanations, it can be seen that the use of Chat GPT can help improve students' writing skills. However, no one has researched the extent to which their

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universities are familiar with ChatGPT, so researchers feel this research needs to be carried out and decided to analyze university students' familiarity with ChatGPT as a tool for enhancing writing skills. This study aims to explore the extent to which students are familiar with ChatGPT as a tool for enhancing their writing skills. Additionally, it seeks to examine how USM University students utilize ChatGPT in their writing processes. By addressing these questions, the study aims to provide insights into the role of AI-assisted writing tools in academic settings and their impact on students' writing development.

2. Method

The design of this study was a mixed method. According to Creswell (2012), a mixed-method design is a process for gathering, analyzing, and "mixing" quantitative and qualitative research and methodologies in a single study to better understand a research subject. This methodology can successfully guide researchers as they move from one stage of their research to the next. In other definitions, a mixed method Combining quantitative and qualitative methodologies is expected to provide a more advanced understanding of the study problems and questions than utilizing one of the methods alone (Creswell, 2012; Frels & Onwuegbuzie, 2013). In this study researcher used a mixed method. In particular, this research assesses students' familiarity with ChatGPT as a tool in their writing abilities by utilizing quantitative data gathered through questionnaires. To get deeper into the experiences and perceptions of the students, qualitative data will also be collected concurrently through interviews.

The population in this study were students in the English language education program at universities in Banda Aceh. The universities in Banda Aceh are Universitas Serambi Mekkah, Universitas Syiah Kuala, Muhammadiyah University, and UIN Ar-Raniry University. Researchers want to know the extent to which students recognize ChatGPT as a tool in their writing skills. The study used a purposive sampling technique to make sure that the participants were relevant to the main research question. We distributed the questionnaire and only 50 students responded and completed the questionnaire, consisting of 42 women and 8 men.

In collecting data, the researcher used two types of instruments; interviews and questionnaires. The questionnaires were distributed digitally. For the digital distribution, I utilized online platforms such as Google Forms, shared the questionnaire link via social media channels frequented by the students, and then interviewed the participants to collect accurate data. Trochim (2008) defines an instrument as "a tool or method used to collect data in a study." Those responses suggested a variety of numbers, including: strongly agree indicated as (4), agree indicated as (3), disagree indicated as (2), and strongly disagree shown as (1). The questionnaire has 20 questions. The researcher used an unstructured interview. An unstructured interview is a research process in which the data for the questions in the interviews do not have a structured answer but rather answers that do not have normal limitations. The goal of this interview is to provide concrete results about what the participants are experiencing. The interview consists of ten questions, and the process is conducted either in person or through the phone. The researcher records each participant's response to each question. To retain the research's authenticity, participants' answers will not be modified or guided.

In the interview, the researcher used descriptive statistics. The researcher analyzes the interview data and records the interview before describing the data that has been collected. The audio was then transcribed by the researcher. At the final, the researcher selects a participant's response that is relevant to the topic and analyzes it.

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3. Results and Discussions

Data were obtained through a questionnaire and interview. Students from Banda Aceh's English department completed the questionnaire. There are 20 questions in the survey relating to ChatGPT and writing skills. To get a better understanding of the opinions and experiences of the participants, questionnaires were given in addition to the interview. 10 interview questions were used to get detailed responses from the participants. The student answers the interview questions and completes the questionnaire based on their experiences. The data collected showed diverse results about the familiarity of ChatGPT as a tool for enhancing writing skills. Therefore, here are the following: Explanation regarding the familiarity of ChatGPT for enhancing writing skills. The researcher used both questionnaires and interviews to gather comprehensive data. Questionnaires provided quantitative data regarding the students' familiarity and usage patterns of ChatGPT, while interviews allowed for in-depth qualitative insights into their personal experiences and opinions. The utilization of a mixed-method technique offered a full understanding of the research subject.

The Students' Familiarity with ChatGPT

Table 1. The Student's familiarity with ChatGPT

No	Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1	I have heard of ChatGPT before	18 36%	30 60%	1 2%	1 2%
2	I understand how ChatGPT works	19 38%	27 54 %	4 8%	
3	I know how to access and use ChatGPT	18 36%	26 52%	5 10%	1 2%
4	I feel comfortable using ChatGPT to assist with my academic tasks	11 22%	31 62%	6 12%	2 4%
5	I have used ChatGPT for academic purposes	11 22%	33 66%	6 12%	

Based on Table 1, 30 (60%) students agreed that they had heard of ChatGPT before and 18 (36%) strongly agreed. Then, there are 27 (54%) agreed that understand how ChatGPT works and 19 (38%) students strongly agree. However, 26(52%) students agree know how to access and use ChatGPT, and 18 (36%) strongly agree. Then 31 (62%) students agreed comfortable using ChatGPT to assist with their academic tasks and 11 (22%) strongly agreed. Furthermore, 33 (66%) students agreed that they have used ChatGPT for academic purposes and 11 (22%) strongly agreed.

The Figure 1 shows that the majority of students are very familiar with ChatGPT. As many as 96% of students have heard of ChatGPT, indicating a very high level of awareness. In addition, 92% of students understand how ChatGPT works, which shows that their knowledge is not only limited to knowing but also understanding its functions. As many as 88% of students know how to access and use ChatGPT, indicating quite high practical knowledge. Students' comfort level in using ChatGPT is also high, with 84% feeling comfortable using it. Finally, 88% of students have used ChatGPT for academic purposes, indicating that ChatGPT is frequently used in academic contexts by the majority of students.

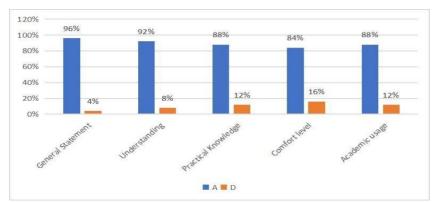


Figure 1. The Students' familiarity with ChatGPT

The result of the student's Familiarity with ChatGPT also support by the results from the interview. The first interview question about what they first learned and their interest when using ChatGPT revealed that most students learn about ChatGPT through recommendations from other people or social media and interested in using ChatGPT is because of its ability to answer various questions and provide extensive and accurate information.

The second question is about how often they use ChatGPT for academic purposes, especially in writing. Most students use ChatGPT quite often, even very often in academic activities and writing assignments. However, some answer that they only use ChatGPT when just needed, not too often. For the third question about the ease of use of ChatGPT, Students experience significant ease in using ChatGPT. It Can be concluded that most students learned about ChatGPT through recommendations from others or social media and were interested in using it because of its ability to answer various questions with extensive and accurate information. The frequency of using ChatGPT for academic purposes varies; most students use it quite often, even very frequently for writing assignments, while others use it only when necessary. Students find significant ease in using ChatGPT and feel greatly assisted in completing writing tasks due to its user-friendliness.

The Use of ChatGPT in Writing Skills

Table 2. The use of ChatGPT in writing skills

No	Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1	ChatGPT helps me develop writing ideas	9	34	5	2
		18%	68%	10%	4%
2	I use ChatGPT in grammar	9	29	12	
	, and the second	18%	58%	24%	
3	ChatGPT helps me structure paragraphs	7	30	13	
	better	14%	60%	26%	
4	I feel ChatGPT helps me in my writing	6	32	12	
	, ,	12%	64%	24%	
5	ChatGPT provides useful suggestions for	5	37	8	
	my writing	10%	74%	16%	
6	I feel more confident in writing after	9	28	13	
	using ChatGPT	18%	56%	26%	
7	I use ChatGPT to write essays or	8	36	5	1
	academic reports	16%	72%	10%	2%

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According to Table 2, 18% students strongly agree and 68% agree that ChatGPT helps them develop writing ideas. 58% students agree that they use ChatGPT to check their grammar in writing. ChatGPT helps them Structure paragraphs better, this statement is agreed with by 30 (60%) students. Furthermore, 32 (64%) students agreed that ChatGPT help them in their writing. In addition, 37(74%) students agreed that ChatGPT provides useful suggestions in writing their writing. Many students feel more confident in writing after using ChatGPT, 28 (25%) students agreed with the statement. Lastly, 36 (72%) students agreed that they use ChatGPT to write essays or academic reports.

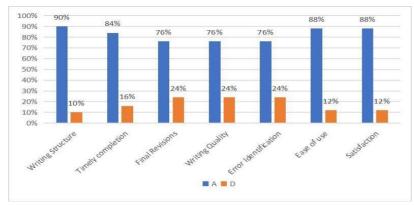


Figure 2. The use of ChatGPT in writing skills

Regarding the graphic above, it is evident that ChatGPT has a positive effect on their writing skill. The majority of students agreed that ChatGPT helped them in their writing skills. The graphic shows that the use of ChatGPT to write essays or academic reports received the highest percentage of agreement, at 88%. The second position is the development of writing ideas with 86% of students agreeing. Writing suggestion takes the third position, with students believing that ChatGPT provides useful suggestions in their writing. The graphic shows that 84% of students agreed. Additionally, 76% of respondents feel that ChatGPT aids in their grammar and believe ChatGPT Help them in their writing. Furthermore, 74 % of students agreed that ChatGPT helps them structure paragraphs better and feel more confident in their writing after using it. The results of the use of ChatGPT in writing skills are also supported by the results from the interview. Here is the explanation: For the first interview question about ChatGPT aspects help in writing. 2 students answered that ChatGPT helped in providing references and sentence structure. 2 other students answering ChatGPT can provide ideas and check grammar.

For the second question about the specific example of ChatGPT helped in writing. 2 students said that ChatGPT was very useful in correcting grammar and essay structure correctly and other students also feel that ChatGPT helps them write in language that is easy to understand and organized. For the fourth question about how often they use ChatGPT for the final revision of their writing. 2 students answered that they very often use ChatGPT for the final revision of their writing and the other 2 do not use it very often. And the last question about ChatGPT helps in writing skills. 3 students stated that ChatGPT is very helpful to their writing skills and 1 student said it helps in vocabulary and sentence structure. It can be concluded that ChatGPT is very helpful in various aspects of writing. ChatGPT helps students in grammar, produce more effective answers, and correct essays. Apart from that, ChatGPT also plays a role in writing, providing useful suggestions, and making students more confident in composing paragraphs and developing writing ideas.

The Use of ChatGPT in Academic Contexts and its Effectiveness

Table 3. The use of ChatGPT in academic contexts and its effectiveness

No	Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1	ChatGPT helps me understand good	11	34	5	
	writing structure	22%	68%	10%	
2	Using ChatGPT makes it easier for me to	13	29	8	
	complete writing tasks on time	26%	58%	16%	
3	I use ChatGPT for final revisions of my	4	34	10	2
	writing	8%	68%	20%	4%
4	I feel my writing quality improves after	8	30	11	1
	using ChatGPT	16%	60%	22%	2%
5	ChatGPT helps me identify common	4	34	10	2
	errors in my writing	8%	68%	20%	4%
6	I find ChatGPT easy to use for academic	7	37	5	1
	purposes	14%	74%	10%	2%
7	I am satisfied with the results I get when	9	35	5	1
	using ChatGPT	18%	70%	10%	2%
8	Using ChatGPT increases my motivation	7	32	11	
	to write academic tasks	14%	64%	22%	

Table 3 shows that in the use of ChatGPT in academic contexts, 68% of students agreed that it helps them understand good writing structure. Many students feel using ChatGPT makes it easier to complete writing tasks on time, 58% of students agree with the statement using ChatGPT makes it easier to complete writing tasks on time. 34 (68%) students agree with the statement they use ChatGPT for final revisions of their writing. Additionally, 60% of students agreed that their writing quality has improved after using ChatGPT. ChatGPT is also considered helpful in identifying common errors in writing, this statement is agreed with by 34 (68%). Regarding ease of use for academic purposes, 37 (74%) of students agree that ChatGPT is easy to use. 35 (64%) of students agree that they are satisfied with the results they get when using ChatGPT. Lastly, 78% of students agree that ChatGPT increases their motivation in writing, with 7 (14%) students strongly agreeing and 32 (64%) students agreeing.

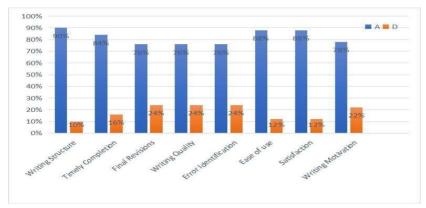


Figure 3. The use of ChatGPT in academic contexts and its effectiveness

The majority of students have a positive perception of using ChatGPT for various aspects of their academic writing. 90% of students agree that ChatGPT helps them understand good writing structure, while 84% agree that ChatGPT makes it easier for

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them to complete writing task on time. In the context of final revisions, 76% of respondents use ChatGPT and also find that it helps them identify common writing errors. 88% of students find ChatGPT easy to use for academic purposes and are satisfied with the results obtained when using it. Additionally, 78% of respondents state that ChatGPT increases their motivation in writing.

For the first question about ChatGPT to help complete writing assignments more quickly or on time. All students answered that using ChatGPT can help them complete writing assignments more quickly. From the interview results, it can be concluded that the use of ChatGPT significantly helps students complete their writing tasks more quickly and on time. All Students stated that ChatGPT makes them more efficient in finishing their tasks. Additionally, all students highly recommend using ChatGPT to their friends, indicating that they find this tool very beneficial and effective for academic purposes.

The topic of this study is how students from various universities perceive the use of ChatGPT in writing skills. This study examines general perceptions, ease of use, and the overall impact of ChatGPT on student's writing tasks. The findings are based on interviews and questionnaires conducted with students from different academic backgrounds. Most students are familiar with ChatGPT, and it was clear from the findings that they understand how ChatGPT works, with 92% of students agreeing and also the interview results Most students often use ChatGPT for academic purposes. ChatGPT has a positive effect on their writing skill, the results were similar to the previous study conducted by Zebua & Katemba (2024), in which the researcher discovered that ChatGPT has the potential to make a positive impact on the field of education and learning. As shown in the table, students agree that ChatGPT helped them mostly in developing writing ideas, writing suggestions, and essay and report writing. In a previous study conducted by Fitria (2023), by using this chatbot users can save both time and effort by utilizing this chatbot to quickly access. These results are also the same as the results of this study with 84% of students agreeing that using ChatGPT makes it easier to complete writing tasks on time. It may be concluded that Students are not only familiar with ChatGPT but also actively use it in their writing for academic purposes.

4. Conclusions

Based on the results of data analysis and discussion, this study concludes that the majority of students are familiar with ChatGPT and feel comfortable using it for academic tasks. A total of 96% of students had heard about ChatGPT, and 92% stated that they understood how it works. This indicates that their knowledge extends beyond mere awareness to a deeper understanding of its functions. Additionally, interview findings revealed that students frequently use ChatGPT for academic purposes.

The questionnaire results further highlight the benefits of ChatGPT in academic writing. A total of 76% of students reported that ChatGPT helped them with grammar correction, while 86% found it useful for generating writing ideas. Interview findings also confirmed that students perceive ChatGPT as highly effective in refining grammar and improving essay structure. In terms of academic writing, 90% of students stated that ChatGPT helped them understand proper writing structures, while 84% felt that it enabled them to complete writing tasks more efficiently. Additionally, 76% of students used ChatGPT for final revisions, indicating its role in enhancing the overall quality of their writing.

Overall, the findings suggest that ChatGPT is an effective tool for improving academic writing skills among university students. It supports various aspects of the

writing process, from idea generation to grammar checking and final revisions. Therefore, ChatGPT can serve as a valuable learning resource for students in developing their writing skills.

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