

## Artificial Intelligence As A Multipurpose Tool For Writing Engagement In Efl Learning Context: Writing Accuracy And Learners' Perspective

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### ABSTRACT

The objective of the research is to find out Learners' Perspective about Artificial Intelligence if their writing accuracy. This study was conducted at the Universitas Muhammadiyah Sumatera Utara, especially for students from the English education study program. The study was designed to assess the impact of AI on the writing accuracy of use AI writing tools, providing valuable insights for educators, developers, and policymakers seeking to optimize AI technologies to support EFL learners in writing their writing text and language learning endeavors. The results of the study showed that AI-powered writing tools can help learners improve their writing skills in several ways: Grammar and Spelling Correction, Style and Clarity Enhancement, Vocabulary and Language Enrichment, Plagiarism Detection, Language Proficiency Assessment, and Personalized Learning Experience (Gayed et al., 2022). As a result, students believe that the AI writing tool paradigm meets their writing needs and helps their writing become better and more accurate.

**Keyword:** Artificial Intelligence, writing accuracy, learners' perspective.



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### 1. INTRODUCTION (10 PT)

The world is experiencing a rapid development in 'Artificial Intelligence' (AI). Technology in this area is progressing to the point where machines can learn and carry out cognitive activities that were previously only possible for humans. Artificial intelligence is now being used to help analyze and interpret data in the scientific community (Utami et al., 2023). Furthermore, new forms of resilience and adaptability in human labor are required as intelligent technology continue to displace human labor. AI's potential to take over many elements of our everyday life and societal organization has led some to worry that it poses an existential threat to humanity.. Artificial intelligence (AI) presents opportunities and challenges, and a firm grasp of what AI is now and what it might become in the future is necessary to fully appreciate these effects (Tuomi, 2018).

While Artificial Intelligence (AI) has the potential to open up new avenues for education, it also has the potential to alter society in ways that educational institutions were not prepared for. Skills gaps and workforce divisions may widen, or educational opportunities may be more equalized. Utilizing AI in the classroom has the potential to alter how students are evaluated and provide new insights into the learning process. Classrooms may be reorganized and rendered obsolete; teaching may become more efficient; and students may be forced to adapt to the needs of technology, robbing them of their freedom of choice and responsibility. It's not impossible at all. The time has come to consider the potential impact of AI on the educational process. This is not an easy topic, and there is a lot of talk about it. But it's worth your time and effort because it's crucial and fascinating.

Indonesia has entered the Society 5.0 age. According to research on the usage of artificial intelligence, internet users in Indonesia will expand by 1.03%, or around 204.7 million users per year, between 2021 and 2022. The bulk of Indonesia's 204.7 million internet users are aged 5 and up, demonstrating that the growth of artificial intelligence in Indonesia is accelerating, accounting for up to 70% of online user data. Students must understand artificial intelligence in today's environment, where information is power. There are issues for both grammatical correctness and

the newcomer's point of view. As a result, as educational technology develops further, it is inevitable that artificial intelligence will have an effect on the classroom setting (Utami et al., 2023).

Artificial intelligence (AI) is a vast scientific field that mimics cognitive abilities like learning, reasoning, and self-correction in artificial systems to solve issues (Mata et al., 2018). Artificial intelligence (AI) applications such as virtual personal assistants, smart vehicles, purchase prediction, speech recognition, and smart home devices are already changing our daily lives in ways that improve human productivity, safety, and health, and even the way we entertain ourselves and communicate with one another (Mata et al., 2018). Rather than delivering fully autonomous systems, AI typically enhances preexisting programs, databases, and environments with more knowledge and reasoning to make them more user- and context-aware. Research and development in nearly every scientific field is fueled by incremental advances in artificial intelligence. This is because we can apply our growing expertise in AI to solving challenges across a wider range of complexity and scope.

One use of technology that can address the aforementioned issues is the use of Artificial Intelligence to incorporate human thought and knowledge into a computer program so that it can solve a problem in the same way that experts do. Artificial Intelligence (AI) applications in everyday life are becoming increasingly diverse. A writing helper, such as Grammarly, is one example of an Artificial Intelligence program that truly assists us with our daily activities. Grammarly's popularity is growing. Grammarly Inc.'s product, which was first launched in 2009, has a large number of daily active users. This increased from 1 million users in 2015 to 30 million users by 2020 (Huang et al., 2020).

Artificial intelligence (AI) can indeed be a versatile tool for enhancing writing accuracy. AI-powered writing tools leverage natural language processing and machine learning techniques to provide various benefits in terms of grammar, style, and overall accuracy. From a learner's perspective, artificial intelligence (AI) can have a significant impact on writing accuracy. AI-powered tools and technologies can help learners improve their writing skills in several ways: Grammar and Spelling Correction, Style and Clarity Enhancement, Vocabulary and

Language Enrichment, Plagiarism Detection, Language Proficiency Assessment, and Personalized Learning Experience (Gayed et al., 2022). Based on the experience of researcher in the English language education program at Universitas Muhammadiyah Sumatera Utara, researcher found that most students especially EFL students need AI in their learning. EFL students use AI since they rely too heavily on the multipurpose tool and need help communicating effectively when they could not rely on it. EFL students may be expected to writing a text for a short length of time in an academic or professional situation, which can increase pressure and influence the quality of their writing. Working rapidly might lead to errors, inaccuracies, or a lack of attention to detail. This study was contribute to the ongoing discussions of learners' perspectives on the role of AI and the writing accuracy of use AI tools, providing valuable insights for educators, developers, and policymakers seeking to optimize AI technologies to support EFL learners in writing their writing text and language learning endeavors.

This research was conducted at the Universitas Muhammadiyah Sumatera Utara, especially for students from the English education study program. The researcher makes a research at English study program because the research focuses on EFL students. Therefore, her research is closely aligned with the English study program, which is related to artificial intelligence applications that EFL students almost use.

## **2. RESEARCH METHOD/MATERIAL AND METHOD/LETERATURE REVIEW (10 PT)**

The researcher typically employed two types of research methods: quantitative and qualitative research. The distinction between quantitative and qualitative research is that quantitative research is framed in terms of using numbers and closed-ended questions. While qualitative is defined by the use of words and open-ended questions. A typical example is a case study (Creswell, 2018).

This study aims to explore how learners' perspectives of artificial intelligence tools while they are used in learning, especially in their writing accuracy. It used a mixed-method approach, where the quantitative data and qualitative data are conducted together. Creswell (2009) mentioned that using a mixed - method employs both quantitative and qualitative study strengths.

The sequential explanatory design was applied to combine and mix various datasets to be collected and analyzed. This research is divided into quantitative and qualitative phases, which are performed independently before combining quantitative and qualitative data for a more thorough knowledge of the research topics and phenomena. The quantitative and qualitative stages' results are combined in a single mixed-method research.

In this study, descriptive statistics are applied in SPSS 26.0 for quantitative data analysis. The students' viewpoint scores were computed by recoding the items under each scale and then totaling the results. Furthermore, data identification and transcribing, initial coding, topic search, theme evaluation, theme definition and naming, and theme finalization are utilized to analyze qualitative data (Braun & Clarke, 2006). The following analyses were used to integrate the data: quantitative analysis, qualitative analysis, identification of similar and dissimilar results, production of joint display tables, comparison of tables and themes, and confirmation, disconfirmation, or expansion of the results (Creswell & Plano Clark, 2018).

The integration and presentation of data results with three intended outcomes: in the coherence of quantitative and qualitative findings 1) Confirmation occurs when findings from one type of data confirm findings from another type of data; 2) Expansion occurs when findings from two sources differ and expand on various insights and address different aspects; and 3) Discordance occurs when findings from two data sets are inconsistent and contradict each other. However, it is still necessary to analyze the distinctions.

### **3. RESULTS AND DISCUSSION (10 PT)**

This chapter addressed the research question for this study. Within the descriptive statistical analysis, the result of the learners perspective about the aim of using Artificial Intelligence tools for learners writing accuracy is shown. Finally, the researcher presented the interpretation of the entire research process.

#### **Research Findings**

##### **1. Learners Perspective**

Before the purpose of this study was carried out, descriptive statistics were used to measure respondents' perceptions and satisfaction with the use of AI and several types of AI used in writing completion and in writing accuracy As for some aspects researched by researchers, namely How useful is the use of AI in the writing process, self-efficacy in the use of AI in the writing process, and the configuration of the use of tools in the AI.

The study examined students' perceptions and their satisfaction since they used AI in the writing process. The advantages of using AI and existing tools in writing completion and accuracy in writing based on the experience and needs of student participants. "Strongly disagree" and "Disagree" combine to produce one negative response, while "Strongly Agree" and "Agree" combine to form one positive response, and "Neutral" is as a single value.

Based on the data above shows that the use of AI aids provides flexibility to learn at a time that suits the desire to learn 19.7%, and with 4.2% stating neutral in this regard, then AI tools (Quiltbot, Grammarly, ChatGPT) are very accessible and used anywhere and anytime with a presentation of 17.3%, students who agree with AI and some types of AI are easily accessed anytime and anywhere and also some students who state Netrral with a presentation of 8.3% of AI that can be used anytime and anywhere. Also in the use of AI in improving writing accuracy, students get a percentage of 18.4% which means that many agree with this statement with AI statements that can improve writing accuracy, some are also neutral about this statement with a percentage of 5.2%. In the statement that AI and the like can help in producing a paper with students who agree with a percentage of 22.0% and there are also those who think neutral about it with a percentage of 8.3% which indicates that some are neutral about this statement, this is aspect at the usefulness of AI in writing and writing accuracy.

In terms of respondents feeling that being very confident when using AI writing aids had no effect at all on the accuracy of respondents' writing, many responded by disagreeing with the presentation 85.9% which indicates that many respondents disagree with the statement that AI has no effect on writing accuracy, in contrast to the statement that AI can increase writing accuracy by a percentage of

21.3% also with some respondents who choose neutral in the statement that AI can increase writing accuracy by a percentage of 3.1%, In the use of AI, the concentration of writing respondents and the accuracy of writing many respondents disagree with this, evidenced by a high percentage of disapproval of 87.5%, which means that many respondents disagree with the statement that AI interferes with concentration and accuracy in writing. In a statement that respondents believe AI is an easy-to-use tool to help respondents complete writing with a percentage of 19.4% with some giving a neutral statement about it. Another case with the statement where AI ad to the respondent's concern in invading respondent's privacy which received a large rejection as evidenced by a fairly high percentage of 93.8% which means that many do not agree that AI can invade respondents' privacy, some respondents in terms of using AI writing tools Quiltbolt, Grammarly, ChatGPT can increase the accuracy of respondents' writing with a percentage of 19.4% and also in this case there are also some who are neutral in this case with a percentage of 5.2% this is the percentage of self-efducing factors in the use of AI in the writing process.

To use AI requires a fairly high cost, many respondents disagree with it with a percentage of 84.4%, which means that AI users to help in writing do not require high costs, also some respondents have enthusiasm in using AI with a percentage of 20%, there are also those who give a neutral response to it with a percentage of 5.2%, AI also helps respondents in paraphrasing writing where this statement also gets a sufficient percentage of 21.4% also as respondents there are those who choose neutral with a percentage of 2.1%, as for many features in AI that are used to improve writing accuracy which is evidenced by the results of respondents 15.8% There were also those who chose to be neutral with a percentage of 10.4% in the satisfaction survey in the use of AI getting a percentage of 18.9% also with some respondents who chose etral with a percentage of 5.2%. This is the percentage in configuration factor in system usage or feature features in AI.

**Table 1 Total score each subcale learners' perspective**

No	Questioner	Score	Percentage
1	<b>Total Score</b>	1689	100%
2	<b>Usefulness of AI in learning to write</b>	213	12,6%
3	<b>Self-efficacy in using AI in the writing process</b>	377	23,3%
4	<b>Configuration of using AI systems and tools</b>	1099	65,1%

The table above illustrates respondents' total silence scores and satisfaction with each related measurement factor. The total score of respondents' perception and satisfaction is (1689), having three subscales of student perception and satisfaction. With a total scot of 1689 or (100%), with several existing categories, the first is the use of AI in writing with a score achievement (213 or 12.6%), then the next category Self-efficacy in the use of AI in the writing process gets a score (377 or 23.3%), then the last category of system use configuration and AI Tools gets the highest score (1099 or 65%).

## Types of Writing Accuracy

This is one of the student essays I interviewed:

### Should Students Get Limited Acces from The Internet

In today's world, we are surrounded by various enhancements in our environment and daily lives. We are already in the twenty-first century, and everything we require is readily available and simple to use, which is why we are reliant. We have already witnessed technological advancements that assist us in making our daily lives easier to manage.

Let's emphasize internet connectivity when we're talking about technological advancements. The internet is extremely significant today because it is where most transactions can be located and accessed. It is crucial in the sense that we may quickly obtain the information we require for our jobs. It is very significant for those students. It will assist them in getting things done with its assistance.

With the involvement of technology, particularly the internet, in our generation, student access to the internet should be regulated. It should and will always be limited, particularly those prohibited sites that are not appropriate for young children or students since they may have an impact on how they view our society.

Students should have limited access to the internet since there are some items and sites on the internet that disclose pornography, which may impact their development, particularly their thinking. It will really lead them to engage in undesirable behaviours that will have a detrimental impact on society. They should only have access to information that is relevant to their needs in school.

Based of that essay, The student essay primarily uses a mix of present and past tenses. Here are examples of sentences with the respective tenses:

**Present tense :** "The Internet has grown to be very beneficial and necessary for any transaction needed to obtain rapid information..."

"Students now place more emphasis on the internet because they can access it to complete their assignments."

**Past tense:** "Students should have constrained access to the internet due to certain sites and resources accessible that provide pornography and may negatively impact their mental development."

The student's essay uses appropriate word meanings, but there's a sentence where the choice of words could be reconsidered for clarity:

"Internet usage often danger getting addicted and turning their lives upside down."

The word "danger" appears to be employed as a noun in this statement, yet it appears to be a verb. It may be more evident to use a verb form like "poses a danger" or "is a danger". "Internet usage often poses a danger of getting addicted and turning their lives upside down." This change clarifies that "danger" is a possible result of excessive internet usage.

Furthermore, the essay uses correct idiomatic expressions, but there is a phrase that could be adjusted for better clarity and idiomatic usage:

"Students should get limited access to the internet is a complicated one."

It would be more idiomatic to say:

"The question of whether students should have limited access to the internet is a complicated one." This revision maintains the intended meaning while using the more idiomatic structure of expressing a question or issue.

Based on overall students essay writing is good. Writing precision requires the use of language, grammar, and mechanics. The essay above uses the correct tense and structure by alternating between present and past tense. Aside from that, in mechanics, the essay above employs accurate spelling and capital letters. The students were able to write a text more confidently because they could use AI writing tools well. The students found many new vocabularies and related to the topics which were discussed while writing a piece of writing such as an essay. It means that they could explore their ideas easier than before because they had enough vocabularies. Students also got better understanding in grammar, especially complex sentence, because they had to use Simple present tense is followed by simple past tense and the present perfect. This tense is appropriate for both passive and active sentences used in writing essay. From the Based on overall students essay writing is good. Writing precision requires the use of language, grammar, and mechanics. The essay above uses the correct tense and structure by alternating between present and past tense. Aside from that, in mechanics, the essay above employs accurate spelling and capital letters. The students were able to write a text more confidently because they could use AI writing tools well. The students found many new vocabularies and related to the topics which were discussed while writing a piece of writing such as an essay. It means that they could explore their ideas easier than before because they had enough vocabularies. Students also got better understanding in grammar, especially complex sentence, because they had to use Simple present tense is followed by simple past tense and the present perfect. This tense is appropriate for both passive and active sentences used in writing essay. From the existing student essays, the average student's writing is accurate. approximately, 7 out of 10 student essays follow the types of writing accuracy. The students' understanding related to mechanics was better because they used to write in proper way and taught by lecturers and also assisted by AI writing tools.

This is also the result of student interview transcript about AI in writing :

**Providing multiple features.** Students across all transcripts indicated that they felt the presence of versatile AI tools on platforms such as Grammarly, Quillbot and ChatGPT in the midst of learning to write in determining the accuracy of their writing. The students felt supported and worry-free in carrying out their learning activities in writing. For example, one student said:

*"The features of AI writing tools can be put to good use if used wisely. They can help check grammar, spelling, and provide suggestions to improve sentences."*

Some students also felt that they struggled to adapt to the AI writing platforms available in modern times. They realize that the systems provided by AI platforms require internet quota in order to be used. However, in the end they have to deal with it and keep up with its development over time. One of them represents that:

*"The weakness of AI is that the internet must be connected, if our signal is faulty then AI cannot be used."* (Student 7).

**Flexibility.** The interview transcripts show that most students think that using AI writing tools provides flexibility for them. It is very convenient for students that they can work on their scientific papers, essays or writing lessons anywhere and anytime, they also have to deal with other home affairs but can still be able to use AI writing tools on their digital platforms. One of them said:

*"AI writing tools really helps writers save time and be more flexible. I can use AI wherever I am so it can ease my work in producing quality writing".* (Student 3).

Furthermore, most of them said that the flexibility of using AI writing tools still requires double-checking to ensure accuracy. One student said:

*"When paraphrasing, the writer needs to re-read and re-correct the sentences that have been given, because sometimes the grammar is not understood and also to avoid plagiarism." (Student 1).*

**Ability to increase students' confidence in their writing skills.** The students indicated that the AI writing tools could slightly increase their confidence in their writing skills. They feel that the AI writing tools are self-learning oriented. They have to learn it all by themselves to ensure the accuracy of their writing. Three of the students I interviewed said:

*"I have a high level of confidence in my ability to produce text accurately. However, I always check and revise the text generated by the AI writing tool, as no tool is perfect." (Student 6).*

*"I think my confidence has increased a lot after using AI writing tools, I also learned how each sentence and phrase is formed cohesively and coherently." (Student 4).*

*"I don't fully believe in my writing using writing aids, but I use writing aids as a tool. This means that even if I use an AI writing aid, I will double-check it with my own understanding without the aid." (Student 1).*

## Discussion

Based on the result, the collected data discovered that there were positive perspectives overall with artificial intelligence writing tools. Students mentioned that they have experienced the support of AI writing tools for their writing skills or accuracy. The success of implementing students writing accuracy is determined by the AI tools used, which means for their grammar, vocabulary, and mechanics. They said the AI was useful for learning the theoretical principles, getting through the writing process more smoothly, and picking up new vocabulary and grammar to utilize in their writing.

With these positive perspective, this findings show that EFL students may benefit from using AI writing tools. Students experience the provided features available in AI writing tools are very beneficial. The variety of features in AI writing tools has yet the necessities of the students in the writing processes. They must employ other AI-based learning tools (Utami et al., 2023). It's essential to consider your specific writing needs and the features offered by each platform. Many of these tools offer free trials, allowing you to test their capabilities before committing to a premium subscription.

Furthermore, the study discovered that students' difficulties were frequently focused on the AI writing tools' proposed payment for premium accounts. Some students were upset since they had used an internet quota allowance to use the AI writing tools and had to pay again to use it with a premium membership. Researchers are also interested in the challenges that students confront when utilizing online English learning. When choosing an AI writing tool, consider the

specific requirements of your writing projects, whether you need assistance with grammar, content creation, paraphrasing or a combination of these features. Experiment with different tools to find the one that best aligns with your writing needs and preferences.

Another positive perception from this study is students confirmed the flexibility of AI writing tools. Perceived time flexibility has a considerable favorable impact on behavioral engagement and academic performance (Kokoç, 2019). From the transcripts, some students said that in using the AI writing tool they felt flexibility in time and place. Students can use AI writing tools anywhere and anytime, shortening their time to do other work while completing their writing using AI writing tools. This findings agrees with previous research from other studies of perspective students by (Utami et al., 2023). The study revealed that It was deemed that AI-based learning tools were flexible, allowing participants to work collaboratively or individually. However, the range of features has yet to meet the needs of those involved in the writing process. They must employ more AI-based learning technologies.

Furthermore, compared to negative perspectives, more positive perspectives were shown by students. This is supported by the findings of interviews on EFL student Universitas Muhammadiyah Sumatera Utara, which show a satisfied response from students. Therefore, it can conclude that students show that AI writing tools help students in accuracy of writing. Most of students said that using They

were more motivated to learn when using AI-based learning tools because they were enjoying discovering new features. This outcome is in line with what

Chen et al. (2020) found: students benefit from AI's new learning opportunities but also face the challenge of adjusting to them. As a critical problem for students, motivation in writing is important to performance in writing (Cutler & Graham, 2008; De Smedt et al., 2016; Feliks et al., 2019).

#### 4. CONCLUSION

According to the findings, students mostly expressed their positive perspective towards Artificial Intelligence as Multipurpose tools for their writing accuracy. This study discovered that when students used AI writing tools, they felt more confident in their writing because of the various and engaging features. The operation of all functions is easy to access, making it suitable for students as beginners to artificial intelligence. Meanwhile, it provides flexibility to use AI at any time convenient for them and allows them to conduct their writing wherever they are. Even though Artificial Intelligence writing applications are available online but come at a price, students still require it because they are motivated to enhance their writing accuracy in terms of grammar, vocabulary, and mechanics.

However, the learners complained that the phrases in the AI writing tool were too advanced and lacked understand language. Furthermore, users cannot be certain that the information obtained using AI writing tools is always accurate. Students must also double-check their writing to ensure that it is accurate and to their taste. Students must pay close attention to their writing's vocabulary, grammar, and mechanics. As a result, students believe that the AI writing tools paradigm meets their writing needs and helps their writing become better and more accurate. However, Teachers are still needed in academic writing classes, in order to help learners in developing their writing abilities and to offer constructive critique in a systematic approach. Artificial intelligence (AI) could be used as a supplemental aid in academic writing classes.

Provide a statement that what is expected, as stated in the "Introduction" chapter can ultimately result in "Results and Discussion" chapter, so there is compatibility. Moreover, it can also be added the prospect of the development of research results and application prospects of further studies into the next (based on result and discussion).

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