# The Importance of Artificial Intelligence on Improving Writing

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Abstract:- Writing skills are becoming more and more important in today's world. Artificial intelligence (AI) can play a key role in improving writing. One option is to provide instant feedback from an AI-based editor. Whether you are writing an email, news to the media, a report, a book, an academic paper, a project proposal, or an answer to a question from your student or client, you always want to be understood. You want to communicate your ideas effectively. However, writing in a foreign language can be stressful if your vocabulary is not rich and you cannot write fluently. Translators and language editors cost a lot and are not available in real-time. This is why artificial intelligence (or AI for short) is so important. It can help you improve your writing skills and write really good content with confidence. In this article, we examined several important and effective factors of using artificial intelligence in writing such as Understanding natural language, improving writing skills with AI-based editing, improving translations or paraphrased content, detecting and removing plagiarism, improving content flow, and developing a trademark writer's style.

Keywords:- "Writing Skills", "Artificial Intelligence"

## I. INTRODUCTION

A challenging task where most of learners do not perform well in English is writing skills. The experience of teachers has proved that teaching writing is a difficult task that has to be conducted responsibly [1]. Intelligence learning can help to put a key way for improving learner skills [2]. Artificial intelligence is a computer system for simulating human intelligence [3.]. Koltovskaia (2020) emphasis on the importance of AI for design automated devices that can do a task as humans do [4].AI is an automated device that can be good solutions to the problems. It can increase behave of human intelligence processes such as learning, reasoning, and self-correction. Using of AI can be useful for both students and teachers. It can be the most important part of education [5]. The advancement of AI has generated news paths for education and teaching. It can help students to learn new skills in a better way. As technology is developing in education, using the kind of technologies such as artificial intelligence and machine learning can facilitate learning systems [6]. Artificial intelligence in education has prepared not only students but a problem-solving way for learning the challenging skills like writing [7].

Personalized learning systems consider analyzing the individual differences and understanding exactly what the learner already knows, providing students with the better education. AI can be an effective tool for incorporating intelligence and learning process in order to monitor student progress. Personalized learning leads to the building of customized learning pathways that make learning more effective and emphasize learner-specific goals related to the learning objective [8].

Artificial intelligence is a powerful tool for creating new opportunities for educators and teachers. and is a bridge for technological innovations and their implementation in education [9].

Artificial intelligence can result in the growth of awareness in learners. It can be an intelligence assistant. It is the Intelligent Computer-Assisted Language Learning (ICALL system). ICALL combines artificial intelligence with computer-assisted language (CALL) systems to deliver software that intelligently coexists with students and responds dynamically to student progress (10).

Developing new pedagogical approaches and introducing technological innovations for learning can be improved by applying AI [11]. AI can improve learning by providing personalized feedback, by using deep learning for customizing learning [12].

AI can help improve your skills in English. It can strengthen the writing skills by detecting errors and by rewriting texts.

## Understanding Natural language:

Correcting spelling and grammatical errors can be improved by writing assistants. The artificial intelligence is a language tool for strengthening correction process by monitoring and analyzing errors and rewriting in a better way [13]. Currently, authors calculate on numerous tools in their diurnal work, similar as spell checkers, top classification, rephrasing tools, plagiarism checkers and so on. The most sophisticated tools on the request must actually understand the textbooks (and the environment!) at least to some degree. The most important pillar of all writing tools available today is natural language processing, or NLP for short. It's a subset of AI that can help machines understand language. When you paste your content into any jotting tool, it's through NLP that a computer translates it for its own convenience. To understand natural language, both semantics and syntax must be analyzed. AI needs to be developed to the point where it understands how human

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language expresses ideas differently. For example, when you propose a toast to the bride and groom, you're probably wishing them health, happiness and success for the future and asking the others to raise their glasses. It really has nothing to do with the other, sandwich-like toast, right?

#### > Improving Writing Skills With AI-Based Editing

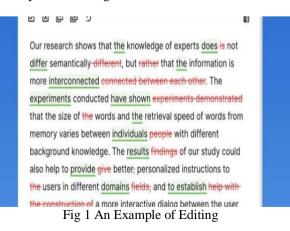
Learners are usually challenging for improving in writing skills. These problem can increase the needs for AI. AI can be a practical tool for editing [14]. Academic and writing communities can take advantage of a variety of AIbased services from AI-based tools such as: B. Grammar correction, paraphrasing, rewriting, plagiarism detection, readability checking, keyword density detection, as well as text generation or text summarization.AI-based editing goes one step further. This includes real-time interactions between human writers and automatically generated One of the most important reasons is the feedback. immediate feedback provided by our AI-based editor. In areas that involve problem solving (such as math and physics), several studies have shown that immediate feedback is highly effective in improving skills. Copy.ai, grammarly business, Jasper, Peppertype.ai and InstaText are examples of how NLP and AI work together to improve content and help writers improve their writing skills. Consider the following example.

Our research shows that the knowledge of the e  $\checkmark$   $\times$  es is not differ semantically different, but rather that information tends to be linked is more

# connected between each other.

A closer look reveals clever paraphrases that reflect the program's deep understanding of the underlying text. "More connected" doesn't sound like it's native English, but it's not easy to come up with a better expression right away...that is, before moving on to the next paragraph.

Of course, the "solution" to the problem of text improvement is rarely straightforward. The text can very well be improved in many ways. The AI applications try to optimize the readability of your text by considering the context of the surrounding text. To avoid judgment fatigue, users are only shown the "solution" with the highest internal readability score. See figure 1.



These tools are designed to help you overcome a wide variety of editorial challenges. Editors of this kind of applications always provide better alternative word pairings and clever synonyms, remove fuzz and redundancies, improve content flow and writing style, etc. to somehow enhance author persuasiveness.

#### Improving Translations or Paraphrased Content

You maybe get frustrated after copying text from a translation or paraphrasing tool .If the content doesn't stick after rephrasing, it's called boring or uninspiring content. In other words, the reader feels nothing that connects them to what is written. This is a boring style that uses big words but doesn't mean much and is often seen in paraphrased content. As understudies are more likely to utilize Google as the Web look motor of choice and depend on comes about close the best of page [15]. The sites can use more for paraphrasing are www.google.com , www.paraphrasing tool.com and www.articlerewritertool.com .

This is one of the first things AI editing tools can help us. Human-computer interaction is often what gives text meaning and leads to effective messages.

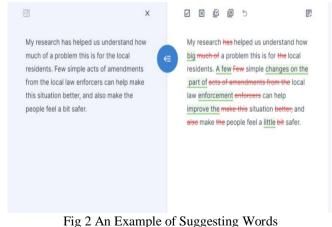
#### Detecting and Removing Plagiarism

In another research, they have investigated about applications of AI especially in plagiarism detection componer that may help ESL in improving writing detecting plagiarism with a plagiarism checker is not difficult these days. However, plagiarism must be properly removed before the content can be used (16).

AI applications can maximize text readability to avoid plagiarism. The ability to rewrite articles is one of the most important skills to master in order to avoid text plagiarism.

## ➢ Improving Content Flow

For content to stick, the text must be easy to read and understand. In other words, don't use empty phrases, complex terms, or jargon.Excerpts from student work. The original text (left) is fine for blogs and conversational emails. However, for academic texts it is rarely acceptable.



See figure.2 how the red-highlighted words are disrupting the flow Compare them with the green words grammarly suggests.

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> Developing A Trademark Writer's Style

AI-powered editing tools let you rewrite based on suggestions without losing the essence of the text. It doesn't have to sound like a machine (See Figure 3).

Don't change:		_	③ Help
From			Add
Stop changing:			
From	→ To		Add
Don't change threefold repetition			
Stop changing			
credit score	→ credi	t rating	
time series prediction	→ time	series forecasting	

Fig 3 An Example of a trademark writer's style

Additionally, every writer wants to keep the words and word combinations that are part of their jargon and personal style. The applications allow you to do different tasks.

#### II. CONCLUSION

The importance and consideration of this consequence is that the future artificial intelligence will be of considerable magnitude.For nearly 50 years, processors and memory chips have been driven by rapid and continuous improvement. During last 10 years, there is an increasing acceptance that this development is nearing its end, and in that respect new sustaining growth in the semiconductor industry requires an approach.

The main purpose of this study is to investigate how artificial intelligence can help to improve self-efficacy, emotions and feelings in the context of EFL. Artificial intelligence applications are effective programs to influence cognitive, non-cognitive and emotional domains. Overall, our findings suggest that AI application can be a useful tool for writing in English writing. It can help Understanding natural language, improving writing skills and translations or paraphrased content. It can also develop a trademark writer's style and detect plagiarism.

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