

INTEGRATING AI-BASED WRITING TOOLS TO ENHANCE STUDENTS' LEARNING PROCESS IN DIGITAL WRITING

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ABSTRACT

The use of technology in education has currently been increasing in recent years. Artificial Intelligence (AI) as a new shape of sophisticated technology opens new chances and possibilities for digitalization of the educational system. AI helps many people, including in the teaching and learning process in the classroom. In this paper, the researcher explored what the AI-based writing tools are that can be used for students' learning, how to use and combine those AI-based writing tools in the learning process, and the result of implementing the tools in the writing class. This study used exploratory-descriptive qualitative research in which the data was taken from documentation of students' learning processes during a semester in the English writing class. It was found that high senior level students need practice in writing such argumentative essays. The use of AI-based writing tools were grammar-checker, word-tune, and plagiarism checker. It was found that students experienced the processes of writing such as brainstorming, constructing ideas and their elaboration, checking the grammar, changing the various forms of writing styles, and checking plagiarism level before publishing them. The positive responses were proof by students, who resulted in the product of self-published articles on the internet.

Keywords: AI, Writing tools, Teaching and Learning, Digital writing

INTRODUCTION

Writing is a highly complex cognitive activity that requires the writer to control multiple variables simultaneously. At the sentence level, this includes checking content, form, sentence structure, vocabulary, pronunciation, spelling and letter formation. In other words, effective paragraphs should integrate ideas and be structured in a way that readers can understand (Nunan, 2003). In writing, Richards & Renandya (2002) stated that writing to be the most difficult skill for L2 learners to master. The difficulty is not only in generating and organizing ideas, but also in converting those ideas into readable text. They also add that the skills involved in writing are very complex.

According to Harmer (2004), the writing process consists of four components. Planning, drafting, editing (editing and revising), and the final product as the writing product. The students should consider the steps. The first step is deciding what information from the text should be included in the writing and for what purpose. The first draft of a piece of writing is called a draft. The students should be allowed a lot of time at this point since they need to concentrate on organizing and developing their ideas rather than developing flawless grammar, punctuation, and spelling. When revising, the teacher should read again what the pupils have written as a draft to look for unclear words or sentences. In editing, the teacher should read again what students write as a draft to check any words or sentences if there are mistakes in writing. The last stage is the final version. After all processes have been done, the students should make the final version. It is possible that the final version is much different in the plan and the draft has been made before. It happens since there are many changes in the editing process.

A set of computer programs called artificial intelligence, or AI for short, is intended to make judgments on its own. These kinds of systems frequently have the ability to learn from the input they get and utilize this knowledge to make future decisions that are more wisely reasoned (Ul Haq, 2023). Additionally, according to UNESCO (2021), Artificial Intelligence (AI) has the ability to address some of the major issues facing education today, revolutionize methods of teaching and learning, and hasten the achievement of SDG 4. Education is the focus of Sustainable Development Goal 4 (SDG 4). It aims to ensure inclusive and equitable quality education and advance possibilities for lifelong learning for everyone. The use of technology helps learners get involved and learn based on their interests. It has been extensively accepted for teaching English in the modern world. Technology satisfies both visual and auditory senses of the learners (Gilakjani, 2017).

In this paper, there are several writing tools used for the English class in a public senior high school in Bekasi. The tools are Grammarly, word-tune, and plagiarism checkers which are web-based and online applications. Grammarly is online grammar checkers used as an AI-powered English writing assistant for EFL students in writing English. It reviews spelling, grammar, punctuation, clarity, engagement, and delivery mistakes in English texts, detects plagiarism, and suggests replacements for the identified errors (Fitria, 2021). Moreover, Wordtune is an AI writing assistant that offers input on spelling, punctuation, and writing style. Wordtune was developed with deep-AI technology, which distinguishes it from other AI writing aides and enables it to comprehend the context of writing and deliver more precise feedback (AI21 Labs, 2021). In addition, plagiarism checkers are software that can be used to cross-check text for duplicated contents, for any copied content over the internet. Last but not the least, students are supposed to publish their writing on digital platforms such as social media, blogspot, and kompasiana media.

The programs mentioned above then combined and integrated into the writing process where students learn how to write certain text digitally. Integrating the tools into writing activity is not an instant process, it needs the procedures to be implemented. The following are some of the steps used in implementing the application program mentioned earlier:

1. As the first step, students are introduced to text-based learning materials in English classes. In this study, students studied exposition text material related to everyday topics and actual issues.
2. After that, the teacher explains the learning plan for writing exposition texts with several stages including brainstorming, elaborating, drafting, editing, revising, and final writing until publishing the text to be an online article.
3. Students read several reference articles about global challenges and the surrounding environment, then students are given the task of determining one of the topics of interest.
4. Next, students design an outline for each main idea developed from a predetermined topic. After there are main points written as an outline, students develop each idea into composed sentences and paragraphs.
5. If the first version of the draft is finished, students as the writers ask the teacher to help them as the proof-reader. Teacher will give advice and suggestions as the notes for improving the writing quality.
6. In this writing steps, teacher lets students to try using the “Grammarly” to check their grammar quality. Then, teacher and students also use “Wordtune” as the tool to check the quality of writing based on context and its coherence.
7. As the final steps, teacher used web-based plagiarism checker to make sure that students do not write any plagiarism or cheating.

METHOD

A method is a way to gather data as information to complete a research project (Nunan, 2007). The descriptive qualitative method was employed in this study. It is a method created to present the issue as it would occur naturally (Burns, N. & Grove, 2004). According to Creswell (2014), the qualitative methodology is utilized for exploring and evaluating certain themes, as well as for the researcher to understand the significance of the data. Documents have been used as the primary source of data in qualitative research. The report of study includes screenshots of students' learning implementation, group discussions from the online classroom, and learning program documentation.

The study took place from a public senior high school in Bekasi which was represented as a school that implemented digital learning at the school. The participants of this study were teachers and students who were involved in the learning program. The teachers were experienced teachers that were competent in planning, implementing, and evaluating the digital teaching. Teacher and students' activities, writing drafts and final results were used as artifacts of this research. This research is used as a teaching and learning report from October to November 2022. There were 30 questions asked to the students who involved using the AI-Based writing tools to assist them in the process of writing the text.

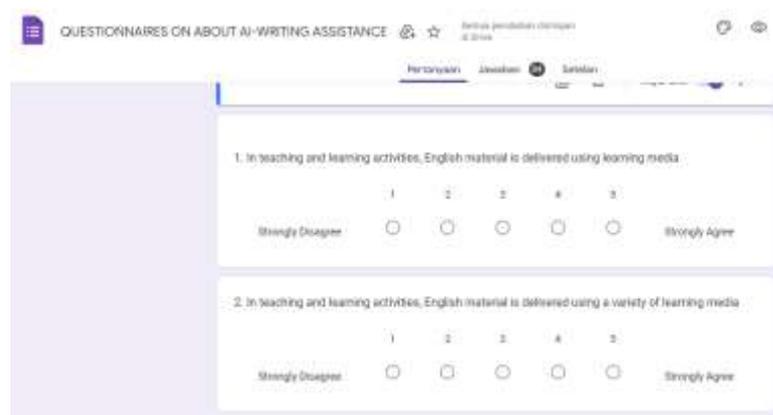
RESULTS AND DISCUSSION

This study is aimed to investigate the teaching and learning process of the writing exposition text by using the AI-based writing tools and to know how the students can produce an article that is published online as the learning product. There were questionnaires and documents used as instruments to data collection techniques. The detail result of the study is presented as follow:

1. The Challenges of Writing in English Subject

English at senior high school was one of the subjects that students must learn in the curriculum structures. In the English program, there were the basic competences that students have to learn and the skills they can achieve after learning the competences. One of the English materials learned in grade XI is exposition text (Basic competences 3.4 and 4.4). The competences are presented; Distinguish social function, text structure, and linguistic elements of several oral and written analytical exposition texts by giving and asking for information related to actual issues, according to the context of their use; understanding the meaning and composing written analytical exposition text, related to actual issues, taking into account social function, text structure, and elements language, correctly and according to context.

However, writing in English has always been a challenge for second language learners to master. Developing students' writing skills is one of the biggest challenges facing ESL teachers in most schools today. Nevertheless, writing has always been a big challenge especially for students learning English in school. Moreover, teachers face some challenges in teaching writing skills to students in school. Teaching writing is made difficult by the challenges students face in learning writing skills. Challenges faced by ESL students include poor vocabulary, poor grammar, poor spelling, poor student preparation, and poor exposure to books and reading materials.



Picture 1. The Questionnaires on Students' Perspective towards the AI-Based Writing Assistance

Based on the questionnaires, it was found that the challenges students face, and why teachers face difficulties to teach writing skills. The challenges teachers face when teaching writing skills include motivating students, different levels of students, difficult materials, and time constraints to teach students. In order to improve students' writing ability, teachers should pay more attention to teaching writing, provide guidance and feedback.

2. The Programs of Using Writing Assistant and Students' Process of Writing

As a result of study, the researcher arranges the programs of integrating the digital tools for writing in the English classes. First, students were taught the basic knowledge of materials and writing steps of exposition text material related to everyday topics and actual issues. Then, the teacher will help students through a study plan for writing an exposition text in several stages covering drafting, editing, revision, final writing, and publishing the text as an online article. As supplementary reading, the teacher gave a few links to the articles on global issues and local issue surroundings. Students were asked to identify one topic they were really interested in writing about.



Picture 2. Reading the Reference Article before Determining the Title

Then, students create an outline for each major idea developed from the given topic. The first sentence at the beginning of a paragraph often describes the topic discussed in the passage. In the closing sentence of the paragraph. The main idea can be expressed as a summary of the information in one paragraph and a link to the information in the next paragraph.

Picture 3. Documentation on Students' Process Developing Main Ideas



In these developing steps, teachers would let understudies undertake utilizing the “Grammarly” and “Wordtune” to check their language structure quality. At that point, teachers and students utilize the tools to check the quality of composing based on explanation of the text structures. The teacher would allow advice and proposal as the notes for making strides in the composing quality.



Picture 4. Grammarly and Wortune, the AI-Based Writing Tools

The picture 5 shows one of students' learning outcomes in composing the exposition texts. Teacher has a role not only as someone who teaches for a certain topic in the class, but also as an instructor who gives guidance to the writing processes. The process of writing itself is not an instant process. Teachers need clear steps to guide students in a few weeks.



Picture 5. One of Students' Final Writing Result Published on the Online Media

At the end, before reaching the purpose of publishing the text into an online platform, the teacher checked students' writing by using a web-based plagiarism checker. So, teachers can be confident to make students publish the exposition text they wrote as the online article without fear of cheating or having plagiarism actions.

CONCLUSION

Writing can be the most difficult skill for L2 learners to master. The difficulty is not only in generating and organizing ideas, but also in converting those ideas into readable text. They also add that the skills involved in writing are very complex. Grammarly, word-tune, and plagiarism checkers are the web-based and online applications. It reviews spelling, grammar, punctuation, clarity, engagement, and delivery mistakes in English texts, detects plagiarism, and suggests replacements. This research is used as a teaching and learning report from October to November 2022. English at senior high school is one of the subjects that students must learn in the curriculum structures. Writing has always been a big challenge especially for students learning English in school. Teaching writing is made difficult by the challenges students face in learning writing skills. Teachers need to pay more attention to teaching writing and provide guidance and feedback.

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