



AI-ASSISTED AND NON-AI-ASSISTED WRITING PERFORMANCES OF GRADE-10 STUDENTS

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Abstract

The study's core objective is to assess the comparison of AI-assisted and non-AI-assisted writing discourse performances of Grade-10 students of Ipil National High School for the academic year 2023-2024. It also investigates the attitude of students towards the use of AI-writing tools specifically on its utilization, usefulness and negative implications, and explores the connection of their attitudes to their profile backgrounds and writing performances.

Utilizing the Descriptive-Correlational design of research, it tries to determine whether the AI-tools influence the writing performance of students. The qualitative research method was also used to find out and describe the observable attitudes of students toward the use of AI-powered writing tools.

With forty-five (45) Grade-10 students involved in this study who are using AI-writing tools such as ChaTGPT, Grammarly, Quillbot, a survey-questionnaire was used to gather their personal data and an inventory questionnaire containing 5-point Likert scale to measure their attitudes towards the use of AI-tools. The students also undergone essay tests to determine their writing performances in non-AI-assisted and AI-assisted which were done in different schedules.

Based on the findings of the study, the writing performance of students using AI significantly improved as compared to their performance without the use of any AI tools. Students can produce quality written outputs if they are being assisted or guided with AI- technology. This is because AI- writing tools improved their construction of ideas, sentences and paragraphs, word choice, voice, grammar, spelling including punctuation.

The finding underscored that one of the reasons why the writing performance of students is poor is because of the educational background of their mothers since mothers are considered as the frontliners of establishing the foundation of students in learning. Moreover, the attitude of students towards the use of AI writing tools is not quite positive. Although the students had a better writing performance using AI, they could not appreciate well to use these tools since they are aware on its negative implications. Furthermore, the study reveals that students have insufficient knowledge about the usefulness or the real purpose of these tools. What they only know about AI



tools are like Google that they just get ideas or information to include in their write ups. For them it is not an aid for the author but an idea -generator. Hence, using AI tools in teaching writing skills of students is a great move but the findings of this study suggest that before integrating the use of AI in writing composition class, the students need to be enlightened or educated about the real purpose of it to avoid its potential misuse. Teachers and educational managers should conduct seminars to help students realize the benefits of these tools aside from knowing its drawbacks or weaknesses. This also calls for the teachers to monitor their students on using AI-powered tools if it is being utilized in the classroom. This is to find out whether they are using it properly or not; whether the students utilize it in terms of its features which is very helpful for them to improve the effectivity and productivity of their write-ups and most importantly to avoid the temptation of plagiarism which is a great threat in the world of the academe.

Keywords: Artificial Intelligence, Writing Skills; Performance; Student Attitude; Effects; Utilization

I. INTRODUCTION

Rationale

As English Teachers the ultimate goal is to teach the learners to be proficient in the language and that is to develop the macro skills: reading, listening, speaking and writing. Among the four macro skills, writing is considered in English as one of the most complex skills. It is in where learners organize their ideas to convey their thoughts into written words. With the various writing activities created by teachers in the classroom like essays, writing narratives to a simple excuse letter, these activities have been the most challenging to the learners. Writing skills don't just include the physical act of writing. Skills like research, planning and outlining, editing, revising, spelling and grammar, and organization are critical components of the writing process. (Kaplan, 2023).

In the classroom learners take the most of their time in the class doing their writing activities. Based on the personal experiences of the researchers in the field as English Teachers more time is spent by the learner in these activities compared to other activities. Sometimes they even request for extra minute to finish their tasks. These writing tasks required much their effort and time and sometimes teachers could not proceed to the next lessons because most of the learners could not complete their task. Among the 45 students of Grade 10 in Ipil National High School, only 30 percent of the class could construct an outstanding essay and the rest rely on the help of the knowledgeable others. More often they tend to plagiarized written works found online just to comply with the activities given by their teacher. Generally, there is a poor performance of learners in their writing skill.



With the use of technology, learners could instantly come up with good essays by just merely typing the topic. The most common tool used by students nowadays is the Generative AI. Examples of which includes Chat GPT, EssayBot, Grammarly, Paragraph AI and others. These Artificial Intelligence applications allows learners to check their grammar usage in the essay, give definition of words instantly plus it allows one to instantly draft an accurate and grammatically correct response for every purpose. The Writing Center of the University of Carolina defined AI as an artificial intelligence tool that allows users to ask it questions or make requests and receive quick written responses. It uses Large Language Models (LLMs) to analyze vast amounts of textual data to determine patterns in words and phrases. Hence creating an ease to learners in doing their writing activities. Educators see opportunities to use AI-powered capabilities like speech recognition to increase the support available to students with disabilities, multilingual learners, and others who could benefit from greater adaptivity and personalization in digital tools for learning. They are exploring how AI can enable writing or improving lessons, as well as their process for finding, choosing, and adapting material for use in their lessons. (Cardona, et al 2023) However, the concept of using AI to teaching and learning process also creates an issue as to which these tools make learners dependent. Potential “learning losses” might be experienced because overreliance leads to ignoring grammar mistakes and the motivation to learn correct spelling and minor details about writing. The idea of generating and conceptualizing their own ideas, putting together their thoughts to make a meaningful essay could also be sacrificed. More so, according to Singh 2023, an AI tool is only as good as the data it is trained on. AI writing tools are vulnerable to bias and therefore cannot be used to complete writing task without human vetting.

It is in this light that the researchers find this topic interesting. The curiosity as to how one student could create a commendable writing activity using the tool motivates the researcher to study the effect of the tool in improving the writing competence of the learners. This study will also provide insights on how AI-driven writing assistance influenced positively or negatively the students’ performance. In addition, the research will help determine to what extent will these Artificial Intelligence Tools be beneficial to the learners in terms of improving the writing competence of the learners. Moreover, the study will also be significant to teachers along with the learners to be guided properly on how these AI tools could be use as effective teaching aids in the teaching and learning process in the classroom.

Statement of the Problem

This study generally aims to determine the AI- assisted and non-AI-assisted written discourse performance of Grade-10 students of Ipil National High School for the academic year 2023-2024. Specifically, it sought to find answers to the following questions.

1. What is the profile of the learners in terms of the following variables?
 - a. Age
 - b. Sex
 - c. Parents’ Educational Attainment



- d. Dialect
 - e. Gadgets used at home
 - f. Online Platform used
2. What is the performance of the Grade-10 learners on the following writing activities?
 - a. Non-AI-Assisted
 - b. AI-Assisted
 3. What is the attitude of the Grade-10 learners towards the used of Artificial Intelligence as a tool for teaching and learning?
 4. Is there a significant difference between the performance of the Grade-10 learners on Non-AI-Assisted and AI-Assisted writing activities?
 5. Is there a significant relationship between the profile of the Grade-10 learners and their performance along the following writing activities?
 - a. Non-AI-Assisted
 - b. AI-Assisted
 6. Is there a significant relationship between the attitude of the Grade-10 learners towards AI and their performance in AI-Assisted writing activity?

Literature Review

The Effects of using Artificial Intelligence as an Aid for Student's Writing

Technology became more and more advance since there are now human-like powered tools and applications used to make work easier and faster in different fields. One of which is the Generative Artificial Intelligence (AI) which is designed to generate texts, codes, images and other media forms. By this modernization of technology, it also affects or changes the way do people in creating contents.

In the field of language education, particularly in writing class, some institutions allow teachers to incorporate AI-powered writing tools in teaching such as Quillbot, Chat GPT, Grammarly and the like to help them train their students to write effectively and substantially. It helps and guides them to enhance the productivity and quality of their written outputs.

AI writing tools such as Quillbot, Chat GPT, Grammarly, Word Tune have been found to significantly improve students' writing skills. These tools are capable to detect errors such as misspelled words, incorrect grammar, punctuation and syntax and provide suggestions to improve clarity and style of writing. They also used for paraphrasing and rephrasing sentence to enhanced effectiveness. On the study of Hosseini et al., (2023) implied that AI tools developed the skills of students on grammar and mechanics as this tool offers commands on how to correct grammar lapses, spelling and punctuation for clarity and delivery. One of which is the the Quillbot, an AI - powered writing tool that developed the students' skills on paraphrasing sentences and contextualizing ideas to avoid plagiarism. Kurniati and Fithriani (2021) found that Quilbot guided the students for better paraphrasing skills.



Moreover, using AI tools can be a big help for students to develop their writing organization and content leading to the enrichment of their academic performance. Marzuki et. al. (2023) stated that integrating AI tools in writing class can promote comprehensive learning environment for students.

Although there are positive impacts of using AI writing tools inside the classroom, there are also the negative effects of it most specially in the part of students. On the study of Marzuki et. al. (2023) stated that despite of using AI tool can be beneficial in improving the students' writing skills, there are concerned regarding the over-dependence of students on using these tools. And that, the students tend to use AI tools instead of generating their own ideas which could limit them to enhance their critical, creative and problem-solving thinking skills.

Apart from this, over-reliant on AI-writing tools can increase the chance of plagiarism and can propagate hidden biases related to gender, race, ethnicity and disability status. The ChatGPT for example, faces these challenges; instead of providing opportunities for students to improve communication, it is sometimes used by students to generate text without attribution and that they create fictitious references (Teel et. al., 2023).

Integration of Generative AI in Teaching Writing Skills of Students

Developing the writing competence of learners involves a combination of instructional strategies, practice, feedback, and fostering a positive attitude towards writing.

One of the sub-skills in writing is the ability of students to narrate which will then be put into words. In the study of Pellas (2023), he proved that Enhancement of narrative intelligence equates with writing self-efficacy: This study's results provide evidence that the use of generative AI platforms can significantly improve undergraduate students' narrative intelligence scores and writing self-efficacy. This finding aligns with the growing recognition of the potential benefits of technology-assisted learning in enhancing core competencies. Educators and institutions can leverage these tools to empower students with the skills and confidence necessary for effective communication.

The development of technologies like smart phones and artificial intelligence has brought new benefits in improving the writing skills of students. As Artificial Intelligence (AI) continue to advance, it provides new concepts on how to harness the writing potential of the learners. This Artificial Intelligence (AI) like ChatGPT can help students in enhancing their writing capabilities, Pavlik (2023) proposed that educators should train students in the effective use of Generative AI. Zhai's (2022) pilot study confirmed that ChatGPT could write a coherent, informative and organized paper. He proposed that teachers and other educational stakeholders should encourage creativity and critical thinking skills to engage students.

One of the keys of Generative AI especially in higher education is for enhancing students' learning experience through its ability to respond to user prompts to generate highly original output. Text-to-text AI generators can provide writing assistance to students, especially non-native students by enabling them to brainstorm ideas and get feedback on their writing through applications such as ChatGPT (Atlas, 2023). Generative AI tools are also believed to be useful research aids for generating ideas, synthesizing information, and summarizing a vast amount of text data to help researchers analyze data and compose their writing (Berg,2023). Tools such as



the Intelligent Essay Assessor are used to grade students' written work and provide feedback on their performance (Landauer, 2023). Mizumoto and Eguchi (2023) examined the reliability and accuracy of ChatGPT as an automated essay scoring tool, and the results show that the ChatGPT shortened the time needed for grading, ensured consistency in scoring, and was able to provide immediate scores and feedback on students' writing skills.

On the other hand, there have been challenges about the limitations of Generative AI and issues related to ethics, plagiarism, and academic integrity. Over reliance on GenAI tools may compromise student' genuine efforts to develop writing competence (Warschauer et.al.2023). A study by Lam and Moorhouse (2022) also found that WordTune, another form of AI writing tool, effectively help students identify their writing weaknesses, thereby promoting self-assessment and learning. GPT-3 has been found to stimulate students creative and critical thinking (Mhlanga,2023). It can be an excellent tool for students to experiment with different writing styles and ideas. These studies highlight the potential of AI tools in enhancing the writing abilities of students.

Students Attitudes and Perceptions of AI in Writing

The 21st Century Learners refers to students who are growing up and learning in the current century. They are known to be critical thinkers, problem solvers, flexible, adaptable and technologically aware. They are also referred to as the digital natives. They are comfortable to using digital tools, devices and internet for communication and even learning. The use of Artificial Intelligence in the educational setting have also been attributed to these learners especially in their writing activities. Academic writing is one of the most challenging and intricate forms of writing because it requires students to engage in critical thinking and to have excellent writing skills. Postgraduate students are frequently assigned academic writing assignments. (Kurniati, et al., 2022)

Examples of AI that were commonly used which posed a positive outlook towards its utilization were Quillbot, Chat GPT, and others. Its utilization has spread worldwide and almost all learners have been practically using it. ChatGPT for example has spread very fast among young people with access to computers and internet, within six months after launch most students were aware of it and between one third and half of them use it regularly. (Rudolph, et al, 2023).

In addition to Kurniati's study in 2023, students' perceptions of the use of Quillbot as digital tools in academic writing, the researchers identified three significant themes related to the benefits of using Quillbot in academic writing for post-graduate students, namely: enhancing students' positive attitude in writing, providing a variety of user-friendly writing features and assisting the students' language development.

Moreover, research into the use of AI in language classrooms shows that students found AI tools such as chatbots and Plot Generator useful for enhancing language acquisition by providing assistance with grammar, guiding them in generating ideas, and helping them communicate in the target language (Bailey et al., 2021; Sumakul et al., 2022).



Over all, in a learning environment, the way students perceive a technological innovation such as GenAI, their views, concerns, and experiences of the technology can have impact on their willingness to utilize the tool and consequently the extent to which the tool is integrated in the learning process. A large proportion of research into tertiary students' perceptions in this area focuses on AI in general and chatbots which are not necessarily powered by GenAI, while students' views and experiences of GenAI tools specifically remain relatively underexplored. Research into student perceptions of AI/GenAI typically investigates students' attitudes, their experiences of AI, and factors influencing their perceptions such as gender, disciplines, age, and year of study (Chan et al. 2022).

By providing personalized and adaptive learning opportunities to international students, AI can enhance the overall quality of education. (Wang, 2020).

Theoretical Underpinnings of the Study

Writing is listed as the fourth macro skills of the English language and is considered as the most difficult to develop. Unlike the other macro skills, writing is a complex process that requires time and effort to master it.

Mastering the skill on writing is not just about writing letters, symbols or texts but also mastering its process and the concepts of language. The main goal of writing is to communicate clearly-to understand by the readers; hence, it is vital to learn and master the concepts and rules of language. This includes the knowledge on grammar, punctuation, and sentence structure.

In school, teachers play a vital role for the development of the students' writing skill. They are the prime movers on what teaching methods should be used which are appropriate for their students' improvement on writing. In the past few years, teachers taught their students the concepts of grammar and syntax before start writing essays and reflections on their formal themes, writing letters, journals and the like. Students also construct ideas on their own, discover their style of writing and evaluate their errors with the guidance of the teacher. But in today's time, students are no longer have a hard time to construct ideas and produce quality written outputs because of the existence of writing applications or tools called Generative AI (GenAI) created by the advancement of technology. Thus, teaching strategies of the teachers to improve the writing skill of students also evolved.

Technology has a big impact on education particularly on developing the macro skills of language to students. Nowadays, there are the what so called Artificial Intelligence (AI)-powered writing tools which are very popular and commonly used by students in their writing assignments. These tools can check grammar errors, provide writing aids and has programs that can create written works like essays without human help. In other words, these tools can provide written texts instantly for students.

According to (T. S. Chang et al., 2021; Gayed et al., 2022; Jeanjaroonsri, 2023; Zhao, 2022), these writing tools are easy and effective to use which it can save students' time and effort to construct written works. In addition, AI writing tools have been used for English language learners who has poor writing performance as these tools allow them to have the opportunity to



evaluate their written works by giving immediate feedback and assistance, improving their writing skills faster (Marzuki et. al., 2023).

Moreover, Hosseini et al., (2023) stated that AI writing tools are designed to analyze written texts by giving comments on many parts of writing, such as grammar, mechanics, syntax, content and structure. This means that by using AI-powered writing tool, it assists the students to determine and correct their errors promptly. This is supported by (Akgun & Greenhow, 2022; Nazari et al., 2021; Rudolph et al., 2023) that the command or feedback coming from the AI tool guides the students on how to improve their writing abilities as they understand the significant concepts of the writing process.

Also, Marzuki et. al., (2023) agreed that AI writing tools such as Quillbot, WordTune, Jenni, ChatGPT and the like improves the writing quality of students in terms of content and organization. Thus, incorporating AI tools in teaching the students to write can be beneficial in increasing the quality of their write-ups.

However, despite of the benefits of using AI writing tools, there are also potential challenges and side effects of it in the part of the students and in the world of the academe.

Recently, there are numerous research studies focusing on AI-powered writing tools, proving that how these tools affect students writing skills. Some research suggests that adopting AI-powered writing tools can help students improve their writing, while others have voiced concerns about the side effect of these tools.

Hence, this bridges up for the researchers to formulate a paradigm that serves as a framework of the study to determine the effects of using AI in writing composition of the students. This will also help the teachers to decide as to what are the best practices to do in developing the student's writing performance whether to integrate or to limit the use of Generative AI tools in writing class. This is also based on the study of Chan & Hu, (2022) that there is a need to examine students' attitude and experience of using towards GenAI in order to gain insights into how it can be integrated in higher education to enhance teaching and learning.

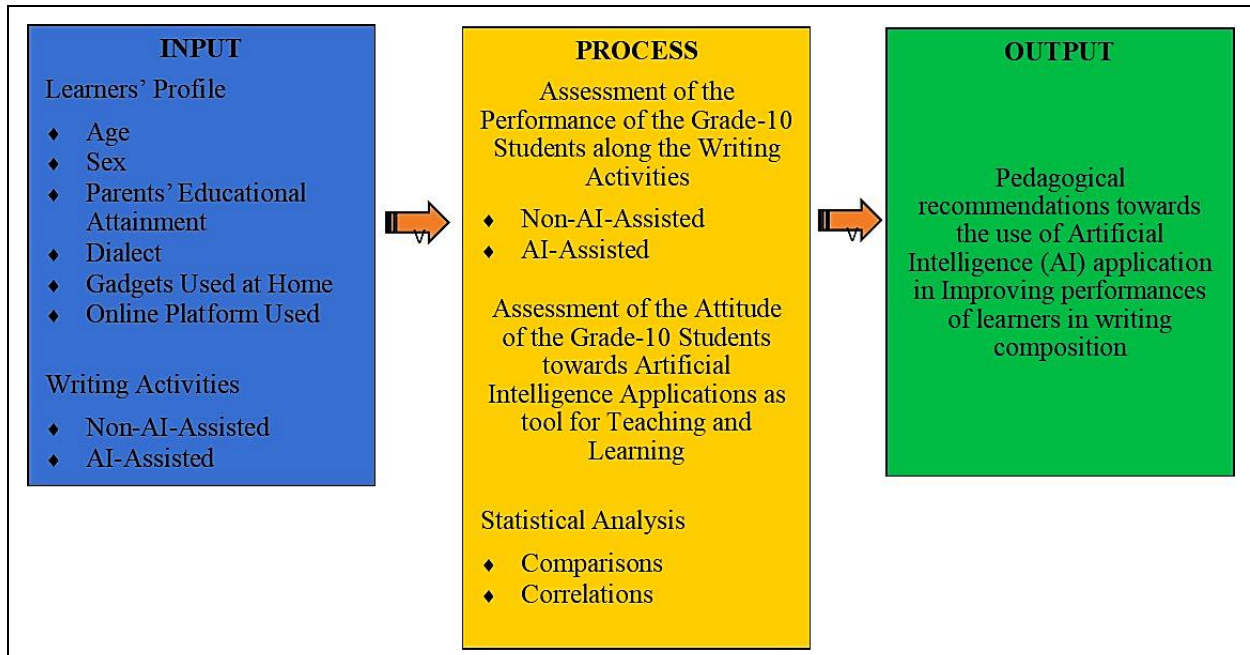


Figure 1. Paradigm of the study

Scope and Delimitation

The study generally focuses on the non-assisted and assisted AI tool written discourse performance of Grade-10 Junior High School students of Ipil National High School for the Academic Year 2023-2024. The study commenced on November 11 to January, 2023.

II. METHODOLOGY

Research Design

This study made used Descriptive-Correlational design of research. This research design was employed to determine whether there are differences between the non-AI-assisted and AI-assisted written discourse performances of learners and also if there are relationships between the profile of the respondents and their attitude towards the use of Artificial Intelligence (AI) to their writing performances. Descriptive-correlational design tries to describe or explain the relationship between two or more variables. It is done through collecting and analyzing data on at least two variables to find out if there is a connection between them. Moreover, the study utilized the qualitative research method to discover and describe the observable behaviors and activities of students towards different situations.

Participants



This study was conducted at Ipil National High School (INHS), Gonzaga East District for the academic year 2023-2024. This secondary institution is situated on the hillside of the vicinity of Ipil, Gonzaga, Cagayan.

There was a total of forty-five (45) Grade-10 Junior High School learners catered in this study and random sampling technique was utilized to ensure the reliability and validity of the study.

Instrumentation

The process of data gathering started through securing a written permission through channels in order to obtain full cooperation from respondents. As soon as the permission was granted, the researchers set the schedules for the conduct of survey and written test in the Grade-10 class.

A survey questionnaire was utilized to gather the data of the respondents. It consists of two parts. The first part was used to gather the profile of the learners which are age, sex, parents' educational attainment, dialect, gadget/s available at home and the online application/s used. The second part was the inventory questionnaire to identify the attitude of the respondents towards the use of Artificial Intelligence (AI) in writing composition. Each item consists of statement to measure their attitudes through 5-point Likert scale. Upon their completion of the questionnaires, these were retrieved for calculation, tabulation, interpretation and analysis.

Moreover, a written test was also established to determine the written discourse performances of learners. It consists of two parts which was conducted in different schedules. The first part was done right after the survey through instructing the learners to write an essay on the topic given to them without using an AI tool. Meanwhile, the second part was scheduled the next day. This time, the learners were instructed to write an essay with the use of an AI tool which they are frequently using. The results of these writing tests were based on the analytic rubric prepared by the researchers.

Levels of Achievement				
Criteria	Excellent 4	Good 3	Fair 2	Poor 1
Focus and Details x3	There is one specific, well-focused topic. Main ideas are clear and are well supported by detailed and accurate information.	There is one clear, well-focused topic. Main ideas are clear but are not supported by detailed information or facts.	There is one topic, but main ideas are not especially clear.	The topic and main idea are not clear.
Organization x3	The introduction is inviting, states the main topic, and provides an overview of the argument. Information is relevant and presented in logical order. The conclusion is strong.	The introduction states the main topic and provides an overview of the paper. A conclusion is included, but does not strengthen the argument/position.	The introduction states the main topic. A conclusion is included, but is not especially relevant/supportive.	There is no clear introduction, structure, or conclusion.
Voice x2	The author's purpose of writing is very clear, and there is strong evidence of attention to audience. The author's knowledge of and/or experience with the topic is evident.	The author's purpose of writing is somewhat clear, and there is some evidence of attention to audience. The author's knowledge of and/or experience with the topic is evident.	The author's purpose of writing is somewhat clear, and there is evidence of attention to audience. The author's knowledge of the topic seems limited.	The author's purpose of writing is unclear.
Word Choice x2	The author uses vivid words and phrases. The choice and placement of words seems accurate, natural and appropriate.	The author uses vivid words and phrases. The choice and placement of words is inaccurate at times and/or seems overdone or inappropriate for the subject matter.	The author uses words that communicate clearly, but the writing lacks variety and seems inappropriate to the subject matter.	The writer uses a limited vocabulary. Jargon or clichés are not used properly and detract from the meaning.
Sentence, Structure, Grammar, Mechanics, and Spelling x2	All sentences are well-constructed and have varied structure and length. The author makes very few errors in grammar, mechanics, and/or spelling.	Most sentences are well constructed and have varied structure and length. The author makes a few errors in grammar, mechanics, and/or spelling, but these mistakes do not interfere with understanding.	Most sentences are well constructed, but they have a similar structure and/or length. The author makes several errors in grammar, mechanics, and/or spelling that interfere with understanding.	Sentences sound awkward, are distractingly repetitive, or are difficult to understand. The author makes numerous errors in grammar, mechanics, and/or spelling that interfere with understanding.



Data Analysis

Descriptive statistics such as frequency and percentage were used to determine the profile of the students. Frequency distribution of categorical data was used to analyze and interpret the profile variables of students such as sex, parents' educational attainment and dialect while frequency distribution of numerical data were also used to interpret the profile variable of students such as age.

Age/Sex/Educational Attainment/Dialect	Frequency (n=45)	Percentage
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Moreover, multiple response set and ranks were used to analyze data which has more than one possible response such as students' gadgets used at home and their online application used. Based on the responses of the students, these will be arranged from highest to lowest to determine the distinction of each choice.

Gadgets used at Home/Online Application Used	Frequency*	Rank
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When it comes to the writing performances of students on non-AI assisted and AI-assisted, it was being categorized using five dimensions. These include focus and detail, organization of ideas, voice, word choice and sentence structure; then the data from each dimension were analyzed using descriptive statistics such as frequency counts, percentage, mean score and standard deviation. Meanwhile, the quality of the writing performances of students is based on the pointing system taken from the rubrics made by the researchers which are poor (3 points), fair (6 points), good (9 points) and excellent (12 points).

Rating	Non-AI assisted		AI-assisted	
	Freq. (n=45)	Percentage	Freq. (n=45)	Percentage
Excellent (12)				
Good (9)				
Fair (6)				
Poor (3)				
<i>Mean</i>				
<i>S.D.</i>				



In terms of the attitude of students towards the use of AI-writing tools, the gathered data were being analyzed using weighted mean and descriptive value. The descriptive value was based on the 5-point Likert scale from the inventory questionnaire.

Statements	Weighted Mean	Descriptive Value
1. I am comfortable to use AI tool whenever I have writing composition assignments.	2.18	Disagree
2. I am using AI tools to produce quality writing outputs.	2.44	Disagree
3. I am using AI tools to generate my ideas instead of doing it by myself.	3.18	Somewhat Agree
10. I used AI writing tools as a compliment in my writing process.	2.38	Disagree
Overall weighted mean	2.67	Moderately Positive

T-test for paired samples was used to test the difference between the performance of the students in AI and non-AI assisted writing activities. Pearson Correlation Coefficient (r) was used to determine the strength and direction of the relationship between the variables.

All hypotheses were tested at 0.05 level of significance.

III. RESULTS AND DISCUSSION

Profile of the Students

Age. Table 1a shows the distribution of students in terms of age. With a rate of 73.3 percent or thirty-three (33) from their total number, it reveals that most of the respondents are fifteen years old followed by sixteen and fourteen years old. This means that the students are in their ideal age for Grade-10 Junior High School year level. This is also based on the age chart of the Department of Education in which a Grade-10 student has an age range from 15-16 or 14-15.

Table 1a. Distribution of students in terms of age

Age (in years)	Frequency (n=45)	Percentage
14	3	6.7
15	33	73.3
16	7	15.6
17 and above	2	4.4
Mean = 15.18 years old		SD = 0.61

Sex. Table 1b shows the distribution of students in terms of sex. Among the forty-five (45) total number of respondents, it is evident that the majority of them are female having 64.4 percent while there are only 35.5 percent who are males.



Table 1b. Distribution of students in terms of sex

Sex	Frequency (n=45)	Percentage
Male	16	35.6
Female	29	64.4

Parents’ educational attainment. The students’ parents’ educational attainments are shown in Table 1c. With a percentage of forty percent (40%), it exemplifies that most of the respondents’ fathers are High School undergraduate. This is the same on their mothers’ educational attainments in which majority of them are also High School undergraduate having a rate of 37.8 percent. This means that most of the parents of students have lack of knowledge to guide and support them in their academic needs due to low educational attainment. This collaborates with the fact that parents who have low educational accomplishments usually have a lower Socio-Economic Status. Socioeconomic status (SES) is being indexed via parent educational attainment, parent occupation, and family income, which is a powerful predictor of children’s developmental outcomes.

Table 1c. Distribution of students in terms of their parents’ educational attainment

Parents’ Educational Attainment	Father		Mother	
	Freq. (n=45)	Percentage	Freq. (n=45)	Percentage
Elementary Graduate	2	4.4	2	4.4
Elementary Undergraduate	7	15.6	5	11.1
High School Graduate	6	13.3	8	17.8
High School Undergraduate	18	40	17	37.8
Tertiary Graduate	8	17.8	7	15.6
Tertiary Undergraduate	4	8.9	6	13.3

Dialect spoken. The Table 1d shows the distribution of students in terms of their dialect. It exemplifies that majority of students are Ilocanos. Ilocano is the mother tongue of 42 students or 93.3 percent which top among the other two dialects which are Ybanag and Tagalog. This finding indicates that the population of Grade-10 class of Ipil National High School is dominated by students whose native language is Ilocano despite the school is situated at the hillside.

In this finding that most of the respondents speaks Ilocano and there are only three of them who differs in mother tongue language, they were still likely to perform similar when it comes to written English (Malana, 2017).

Table 1d. Distribution of students in terms of dialect spoken

Dialect	Frequency (n=45)	Percentage
Ybanag	1	2.2

Ilocano	42	93.3
Tagalog	2	4.4

Gadgets Used. The table 1e shows the distribution of students in terms of gadgets used at home. It can be gleaned from the table that most of the students have mobile phones which rank first among the other stated gadgets. However, there are also some who are using laptop and tablet. This is to address the assumption that mobile phones are portable because of its size. This also implies that students nowadays are exposed to gadgets or technologies, given the fact that they are in the what so-called Gen Z Era or known to be the Digital Era. Students nowadays are fond of using mobile devices because of its convenience and comfortability - it has many purposes in the life of users. It can be use as means of communication, entertainment, information source and other online activities.

Based on the studies of (Eckleberry-Hunt, Lick, & Hunt, 2018; Schwieger & Ladwig, 2018), they stated that Gen Z students are independent learners who are expected to be technology-driven in their educational experiences and value active hands-on learning experiences through the integration of technology. This implies that the respondents based on their age, likes teaching - learning process that has the integration or utilization of technology.

Table 1e. Distribution of students in terms of gadgets used at home

Gadgets used at Home	Frequency*	Rank
Mobile Phone	44	1
Laptop	9	2
Tablet	6	3
Desktop	1	4

**multiple response set*

Online Application Used. Table 1f shows the distribution of respondents in terms of online application used. It exemplifies that Google is the most commonly used by students which rank first followed by Facebook and Youtube. This implies that most of the students search information from the internet however, they also fond of connecting to the internet for entertainment purposes.

Table 1f. Distribution of students in terms of online application used

Online Application used	Frequency*	Rank
Google	44	1
Facebook	43	2.5
Youtube	43	2.5
Tiktok	39	4
Bing	3	5

**multiple response set*

Performances of the Grade 10 students in Non-AI and AI-assisted Writing Activities

Focus and Details. Table 2a shows the comparison of students’ writing performance between non-AI-assisted and AI-assisted in terms of focus and details. With a mean of 11.27 which has a rating quality of excellent, it means that the writing performance of students in terms of constructing ideas or contents is better when using AI tools. Thus, producing write-ups effectively and substantially. This is supported by the study of Marzuki et. al. (2023) that AI powered writing tools can be a big help for students to elevate their writing productivity and content leading to the enrichment of their academic performance.

This also implies that students’ writing performance is not just as excellent as their performance when they used AI tools is because there are times that they include ideas which are not relevant to the topic. Some students tend to include irrelevant ideas just to increase the content of their write ups but not its substance.

Table 2a. Students’ writing performances in terms of Focus and Details

Rating	Non-AI assisted		AI-assisted	
	Freq. (n=45)	Percentage	Freq. (n=45)	Percentage
Excellent (12)	8	17.8	35	77.8
Good (9)	17	37.8	9	20.0
Fair (6)	13	28.9	1	2.2
Poor (3)	7	15.6	-	-
Mean	7.73 (Good)		11.27 (Excellent)	
S.D.	2.90		1.45	

Organization. The comparison of the students’ writing performance between non-AI-assisted and AI-assisted in terms of organization of ideas is shown in Table 2b. Based on the finding, the writing performance of students is better in terms of organizing their ideas when using AI tools having a weighted mean of 10.93 or excellent as compared to their performance without the use of AI which only has a weighted mean of 6.47 or fair. This adheres that AI-writing tools have an impact on how the students arrange and connect their ideas to produce meaning. This also implies that AI-writing tools can guide students to consistently interconnect sentences and paragraphs logically and orderly to increase the meaning of their write-ups. This is supported by the study of Marzuki et. al. (2023) that AI writing tools positively improved the students’ writing quality, particularly on enhancing coherence and organization of ideas.

Table 2b. Students’ writing performances in terms of Organization of Ideas

Rating	Non-AI assisted		AI-assisted	
	Freq. (n=45)	Percentage	Freq. (n=45)	Percentage



Excellent (12)	4	8.9	31	68.9
Good (9)	12	26.7	13	28.9
Fair (6)	16	35.6	1	2.2
Poor (3)	13	28.9	-	-
Mean	6.47 (Fair)		10.93 (Excellent)	
S.D.	2.86		1.71	

Voice. The comparison of the students’ writing performance between non-AI-assisted and AI-assisted in terms of voice is shown in Table 2c. The table presents that the writing performance of students has improved in terms of voice (tone/point of view/ style of writing) in AI-assisted as compared to their non-assisted writing performance. The non-assisted writing performance of students has only a weighted mean of 4.40 which is remarked as fair whereas, the writing performance of students using AI significantly improved to 6.53 which has remarked as good. This means that using AI in writing composition can help students express their ideas or perspectives in a unique way. This collaborates with the fact that AI writing tools have been found to significantly improve students’ writing skills by providing suggestions to improve clarity and style of writing (Lam and Moorhouse, 2022).

Table 2c. Students’ writing performances in terms of Voice

Rating	Non-AI assisted		AI-assisted	
	Freq. (n=45)	Percentage	Freq. (n=45)	Percentage
Excellent (8)	1	2.2	18	40
Good (6)	18	40	21	46.7
Fair (4)	15	33.3	6	13.3
Poor (2)	11	24.4	-	-
Mean	4.40 (Fair)		6.53 (Good)	
S.D.	1.68		1.38	

Word Choice. Table 2d shows the comparison of the students’ writing performance between non-AI-assisted and AI-assisted in terms of word choice. It exemplifies that the writing performance of students in using AI writing tool is better in terms of word choice. Having a weighted mean of 6.53 or good as compared to their performance without the use of AI which only has a weighted mean of 4.27 which remarked as fair, this means that using AI tools in writing composition of students may help them pick the appropriate words to use in their writing output given the fact that these tools can suggest words for meaningful ideas (Hosseini et al., 2023). This also implies that students have a fair performance in word choice when writing is that because of lack of vocabulary.

Table 2d. Students’ writing performances in terms of Word Choice

Rating	Non-AI assisted		AI-assisted	
	Freq. (n=45)	Percentage	Freq. (n=45)	Percentage
Excellent (8)	3	6.7	18	40
Good (6)	12	26.7	21	46.7
Fair (4)	18	40	6	13.3
Poor (2)	12	26.7	-	-
Mean	4.27 (Fair)		6.53 (Good)	
S.D.	1.79		1.38	

Sentence Structure, Grammar, Mechanics, and Spelling. The comparison of the students’ writing performance between non-AI-assisted and AI-assisted in terms of sentence structure, grammar, mechanics and spelling is shown in Table 2e. The table indicates that the writing performance of students under AI-assisted has improved in terms of sentence structure, grammar, mechanics and spelling which is way better than their non-assisted writing performance. The non-assisted writing performance of students has only a weighted mean of 3.82 which remarked as fair while the writing performance of students using AI significantly improved to 6.36 which remarked as good. This means that using AI in writing composition can help students to develop their linguistic competence such as grammar and syntax given the fact that AI tools utilize advanced algorithms to detect common errors in grammar, syntax, spelling and punctuation. These tools also have features for paraphrasing and refining sentences for enhance effectiveness in writing. These finding agrees with the study Tambunan et al. (2022) highlighting that using AI tool such as Grammarly improved students’ grammar and punctuation. This tool analyzes the user’s text, provides real-time suggestions for enhancing grammar, spelling, punctuation, clarity, engagement, and delivery. This also implies that students have fair performance in terms of sentence structure is because there are rules that need to consider when writing sentences.

Table 2e. Students’ writing performances in terms of Sentence Structure, Grammar, Mechanics and Spelling

Rating	Non-AI assisted		AI-assisted	
	Freq. (n=45)	Percentage	Freq. (n=45)	Percentage
Excellent (8)	0	0	15	33.3
Good (6)	9	20	23	51.1
Fair (4)	23	51.1	7	15.6
Poor (2)	13	28.9	-	-
Mean	3.82 (Fair)		6.36 (Good)	
S.D.	1.40		1.37	

Overall score. Table 2f shows the overall writing performances of students on both non-AI and AI-assisted. Generally, the students’ writing performance significantly improved when they used AI tools. Majority of them got excellent scores which is contrarywise with their writing

performance without the use of AI tools in which most of them got fair and poor performance.

Having an overall weighted mean of 41.62 which is excellent, this finding means that AI tools can help students to improve their writing performance in different aspects such as in focus and details, organization of ideas, voice, word choice, sentence structure, grammar, spelling and mechanics. This is because of the fact that AI tools have writing assistance and algorithms which help students polish and correct their mistakes (Atlas, 2023). This further supports by Y. Liu et al., (2023) that AI writing tools, with their capacity for providing prompts and suggesting improvements, can support students in articulating their thoughts and enhancing the richness of their content.

Table 2f. Overall writing performances of students on both Non-AI-Assisted and AI-assisted

Rating	Non-AI assisted		AI-assisted	
	Freq. (n=45)	Percentage	Freq. (n=45)	Percentage
Excellent (39 to 48)	7	15.6	37	82.2
Good (30 to 38)	10	22.2	7	15.6
Fair (21 to 29)	14	31.1	1	2.2
Poor (12 to 20)	14	31.1	-	-
Mean	26.69 (Fair)		41.62 (Excellent)	
S.D.	9.75		5.34	

Attitude/Evaluation Results

Utilization. Table 3a shows the attitude of students towards the use of AI writing tools in terms of its utilization. The table generally stated that most of the students treat AI writing tools as their means of producing their ideas or write ups. This is regarded on the students’ statements that they “somewhat agree” to use AI to generate their ideas instead of doing it by themselves, and they value AI generated text over their efforts in writing ideas; as their weighted means reveal which are 3.18 and 3.04 respectively. Since the students give full trust on the adequacy of AI in generating text, they also become dependent to it and it becomes their habit to use AI whenever they have writing activities. This reveals on the results of the statements that most students became their habit to use AI tool during their writing assignments, prefer to use AI writing tool to improve their language skills than of doing paper-and-pencil drills and they are over-dependent to use AI writing applications which these all have a descriptive value of “somewhat agree”. These findings address the assumption that students in this generation are fond of instant output. They do not want to exert some efforts to produce their own product. This also attributed to Table 1f in which their most online application used is the Google. Students usually tend to search information or ideas from the internet and they do it the same way in using AI tools. They only search ideas for their written content.

However, the students are not comfortable to use AI in writing composition despite the idea that these tools can help them to produce written outputs instantly. They also disagree on the statements that AI tools can produce quality outputs and are used as a compliment in their writing process. This means that students are not fully-aware on the use of AI. They are not well-educated about these new invented tools. This is probably because students just see these tools as search engine that the purpose of it is to search ideas which is very improper practice due to the possibility that it can increase plagiarism among students. This may also lead to the potential misuse of AI.

Moreover, students do not know the real purpose of AI writing tool because they were just influenced to use these kinds of tools because of popularity or trend.

Table 3a. Students' Attitude on using Generative AI in writing composition

Statements	Weighted Mean	Descriptive Value
1. I am comfortable to use AI tool whenever I have writing composition assignments.	2.18	Disagree
2. I am using AI tools to produce quality writing outputs.	2.44	Disagree
3. I am using AI tools to generate my ideas instead of doing it by myself.	3.18	Somewhat Agree
4. AI applications for writing is easy and convenient for me to use.	2.38	Disagree
5. It became my habit to use AI tool during my writing assignments.	3.07	Somewhat Agree
6. I prefer to use AI writing tools to improve my language skills than of doing paper-and-pencil drills.	2.71	Somewhat Agree
7. I am cautious of using AI-powered writing tools.	2.51	Disagree
8. I value AI generated texts over my efforts in writing my own ideas.	3.04	Somewhat Agree
9. I am over-dependent to use AI writing applications.	2.78	Somewhat Agree
10. I used AI writing tools as a compliment in my writing process.	2.38	Disagree
Overall weighted mean	2.67	Moderately Positive

Usefulness. The students' attitude towards the use of AI writing tool is presented in Table 3b. The table demonstrates that students strongly disagree that AI writing tools could help them correct grammar, spelling and punctuations errors as reckoned by 1.71 weighted mean. They also disagree that writing tools could help them evaluate writing outputs, condensed text to its most important and relevant ideas, identify writing weaknesses to promote self-assessment and learning, experiment with different styles and ideas, outline topic and brainstorm ideas, improve their paraphrasing and grammar skills, and improve the clarity of their ideas.

This finding means that students are not aware on the fundamental benefits of using AI in their writing composition. This is attributed to the finding in Table 3a that students merely used AI tools for content-generator since students nowadays tend to have instant written outputs. They do not have a depth knowledge on the real purpose of generative AI tools.

Table 3b. Students' Attitude towards the use of AI writing tool in terms of usefulness

Statements	Weighted Mean	Descriptive Value
1. Using AI tools guide me to evaluate my writing output and on how to increase my writing activity.	1.87	Disagree
2. I am using AI applications to condense texts to its most important and relevant ideas.	2.38	Disagree
3. AI writing tools help me to correct grammar, spelling and punctuation errors.	1.71	Strongly Disagree
4. With the use of AI writing tools, it helps me to identify my writing weaknesses, thereby promoting self-assessment and learning.	2.13	Disagree
5. Overall, AI writing applications are excellent tools to experiment with different writing styles and ideas.	2.36	Disagree
6. Using AI tools could quickly outline my topic and help me brainstorm ideas.	2.07	Disagree
7. I want to use AI applications in my writing activities to improve my paraphrasing and grammar skills to produce decent content.	2.20	Disagree
8. I used AI tool such as Quillbot specializes in paraphrasing, to help me avoid plagiarism.	2.42	Disagree
9. I easily construct essays, articles, journals, and research studies when using AI applications like Quillbot, ChatGPT, Grammarly and the like.	2.29	Disagree
10. Writing with the guidance of AI applications improve the clarity of my ideas.	2.29	Disagree
Overall weighted mean	2.17	Negative

Negative Implication. Table 3c illustrates the attitude of students towards the use of AI writing tools in terms of its negative impact. Based on the data presented, the students most likely agree on the negative impact of using AI in writing composition with an overall weighted mean of 2.79 which corresponds to moderately positive. These includes AI may promote bias on gender, ethnicity and culture, can violate ethics of writing, sinister or threatening, can cause difficulty to construct sentences and paragraphs because of over-reliant to AI, may not effective in addressing higher-order writing elements, may deprive competence in writing, can cause laziness, it may not fully grasp the subtleties and nuances of human language and emotion, potentially leading to suggestions that may not be appropriate or accurate in a given context and may not improve the 21st century skills of students such as critical, creative and problem-solving thinking skills.

This finding means that students are knowledgeable on the disadvantages of using AI in writing composition. This also relates to one of the findings in Table 3a that students are not comfortable on using AI writing tools because they are aware to its negative impact.

Table 3c. Students' Attitude towards the use of AI writing tool in terms of its Negative Implication

Statements	Weighted Mean	Descriptive Value
1. Using generative AI on writing may promote bias on gender, ethnicity and culture.	2.80	Somewhat agree
2. AI writing tools can violate the ethics of writing.	2.69	Somewhat agree
3. I find AI writing tools sinister or threatening in the academe.	2.82	Somewhat agree

4. I find myself difficult to construct sentences and paragraphs without using AI tools like Quillbot, ChatGPT and the like.	2.71	Somewhat agree
5. I prioritize quick fixes of my writing errors from AI tools instead of doing it by myself.	2.98	Somewhat agree
6. Over-reliant on using AI writing tools may weaken my spelling, punctuation and vocabulary skills.	2.60	Somewhat agree
7. Using AI tools for writing is not effective in addressing my higher-order writing elements, such as argument structure and coherence.	3.04	Somewhat agree
8. AI writing applications may deprive my competence on writing and could make me lazy.	2.84	Somewhat agree
9. Using AI applications might not fully grasp the subtleties and nuances of human language and emotion, potentially leading to suggestions that may not be appropriate or accurate in a given context.	2.76	Somewhat agree
10. When using AI applications in writing, it does not improve my 21st Century skills such as critical, creative and problem-solving thinking skills.	2.69	Somewhat agree
Overall weighted mean	2.79	Moderately positive

Summary. Table 3c exemplifies the overall attitude of students towards the use of AI in writing composition. It can be gleaned from the table that general attitude of students towards the use of AI is moderately positive with an overall weighted mean of 2.79.

This finding means that students do not completely appreciate these tools because they have inadequate knowledge on its advantages or they overlooked the real purpose of AI in the field of writing. However, they are aware on its drawbacks or weaknesses.

This is based on the results of students' attitude on its usefulness which is negative and utilization which is moderately positive.

This suggests that students need to be enlightened more about these new invented tools particularly on its fundamental purpose and benefits aside from its negative implications.

Table 3c. Overall Attitude of Students towards the use of AI in writing composition

Students' Attitude towards the use of AI in Writing Composition	Weighted Mean	Descriptive Value
Utilization	2.67	Moderately Positive
Usefulness	2.17	Negative
Negative Implication	3.21	Moderately Positive
Composite mean	2.68	Moderately positive

Difference between the performances of the Grade 10 students in Non-AI and AI-assisted writing activities

Table 4 presents the comparison test result between the performance of the Grade-10 students in non-AI and AI-assisted writing activities. With a computed t-value which is 12.744 and with an associated probability of 0.000 which is lower than the level of significance 0.05, it reveals

that there is a significant difference between the writing performance of students in non-AI assisted (mean score= 26.69, SD =9.75) and AI-assisted (mean score= 41.62, SD= 5.34). This means that with the use of AI-powered tools, students can improve their writing skills which enable them to produce quality written outputs. This is because AI tools can offer algorithms and error checking features which guide the students to refine their writing output easily. This implies that using AI powered tools is beneficial among students most specially those who are struggling in writing activities. Also, it can be beneficial for teachers which it does not need them to spend more time teaching the ways on how to correct their errors in writing. This further implies that AI tools can enable students to discover and detect their writing errors and at the same time, to learn how to rectify these errors.

Table 4. Comparison test result between the performances of the Grade 10 students in Non-AI and AI-assisted writing activities

Variables	Mean	S.D.	t-value	p-value	Effect Size	Statistical Inference
Non-AI assisted	26.69	9.75	12.744	0.000	0.79	Significant
AI-assisted	41.62	5.34			(Large)	

*tested at 0.05 level of significance

Relationship between the performances of the Grade-10 students and their profile

With non-AI-assisted writing activity performance. Table 5a presents the correlation test result between the performance of the Grade-10 students in non-AI-assisted writing activity and their profile. The table reveals that the students’ mothers’ educational attainment as reckoned by the r- value of 0.394 and a p- value of 0.007 significantly correlates with students’ writing performance in non-AI assisted. This finding means that the role of a mother has something to do with the performance of student in writing and also in academics in general. This is because mothers are considered as the first teacher at home for students who teach and nurture them how to read and write. This implies that a great foundation of students in writing starts at home and mothers are the frontliners or the prime movers in upskilling them to write. Hence, the higher educational background the mother has, the better performance of the student in writing.

Table 5a. Correlation test result between the performances of the Grade 10 students in non-AI-assisted writing activity and their profile

Variables	Correlations	p-value	Statistical Inference
Performance in non-AI-assisted writing activity			
Profile			
Age	-0.196	0.198	Not significant
Sex	0.149	0.327	Not significant
Father’s educational attainment	0.142	0.351	Not significant
Mother’s educational attainment	0.394	0.007	Significant

Dialect	-0.024	0.875	Not significant
Devices owned	0.134	0.381	Not significant
Online application used	0.282	0.060	Not significant

**tested at 0.05 level of significance*

With AI-assisted writing activity performance. Table 5b shows the correlation test result between the performance of the Grade-10 students in AI-assisted writing activity and their profile. The table reveals that the age of students having the r-value of -0.354 and a p-value of 0.017 significantly correlates with the writing performance of students when using AI tools in inversed manner. This means that younger students relate to higher performance in AI-assisted writing activities. This finding transpires because the age of students relates to their generation which is called the Genz Era or they are commonly referred to as the fully “digitally native” generation. This means that students at this age grew up with social media and smartphones. Thus, they are technologically adept. This implies that students are fascinated to use or navigate applications efficiently since they are exposed to technology.

On the other hand, the Google, which is the most online application used by the students also found to be significantly correlates with the AI-assisted writing performance of students having the r-value of 0.473 and a probability value of 0.017. This finding means that with the students’ knowledge on using search engine from the internet like Google, it influences their use on AI-writing tools; that is, to search ideas, which is true because AI-writing tools such as ChatGPT can generate human-like ideas which is hard to detect whether is it copyright or not (Khalil and Er, 2023). This confirms Hu’s (2023) concern about the elusive nature of ChatGPT which challenges the roles of gatekeepers. Khalil and Er (2023) indicated that this results in students’ increasing use of the software as a shortcut to writing academic essays.

According to the study of Chan and Lee (2023), this supports this finding that Gen Z students use GenAI technologies in higher education irresponsible and unethical because of cheating and plagiarism.

This is also rooted on the finding in Table 3a that students tend to use AI writing tools as content-generator rather than guide for effective writing performance. The students view AI-writing tool as information-provider like Google which is supposedly not because it can violate ethics of writing.

Table 5b. Correlation test results between the performances of the Grade 10 students in AI-assisted writing activity and their profile

Variables	Correlations	p-value	Statistical Inference
Performance in AI-assisted writing activity			
Profile			
Age	-0.354	0.017	Significant
Sex	0.220	0.147	Not significant
Father’s educational attainment	-0.029	0.851	Not significant

Mother's educational attainment	0.106	0.488	Not significant
Dialect	-0.043	0.779	Not significant
Devices owned	0.044	0.772	Not significant
Online application used	0.473	0.001	Significant

**tested at 0.05 level of significance*

Relationship between the performances of the Grade-10 students in AI-assisted writing activity and their attitude towards AI

The correlation test result between the performance of the Grade-10 students in AI-assisted writing activity and their attitude towards AI is shown in Table 6. The table reveals that the attitude of students towards the use of AI in terms of utilization significantly correlates with the performance of students in AI-assisted writing activity. With an r-value of 0.415 and a probability of 0.005, it implies that the way how the students utilize AI writing tools during the writing process greatly affects their performance. Based on the finding in Table 3a that students are fond of producing instant outputs in which they treat AI writing tool as generator of ideas just like Google, there is the assumption that students have a better performance in writing using AI tools merely because they allow these tools to create their write ups-they became over-reliant to it since, they lack of knowledge about the usefulness or the real purpose of AI. This is considered as one of the potential challenges of using AI in writing classrooms as what Johnke et al., (2023) stated that students might use these AI tools not just for refining their language, but also for generating ideas, potentially curtailing their creative thinking and originality.

Table 6. Correlation test results between the performances of the Grade 10 students in AI-assisted writing activity and their attitude towards AI

Variables	Correlations	p-value	Statistical Inference
<i>Performance in AI-assisted writing activity</i>			
<i>Attitude towards AI</i>			
Utilization	0.415	0.005	Significant
Usefulness	0.172	0.258	Not significant
Negative impact/disadvantage	-0.223	0.141	Not significant

**tested at 0.05 level of significance*

IV. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Synthesis



Based on the findings of the study, the respondents are in their ideal age for Grade-10-year level and majority of them are female. This also underscored that they are technologically adept since their age corresponds in today's generation which is called the Gen Z Era otherwise known as Digital Era wherein, they are exposed to different gadgets like the smartphones which is found out to be their commonly used device at home and they grew up with the access from the internet. In connection to this finding, the study also found out that the most used online application by students is the Google- a search engine used to gather information or ideas. With this finding, the study also reveals that using Google by students influenced their use on AI-writing tools.

Moreover, majority of their parents could not able to finish their secondary education which has an impact on the performance of students in writing particularly their mothers' education. It has found out that the educational background of their mothers may contribute to their writing performance in school. Meanwhile, Ilocano is the prevalent mother tongue of the students despite the fact that they are located at the side of a mountain.

Furthermore, the study found out that the performance of students in writing significantly improved if they are being assisted or guided with AI- technology. AI- writing tools improved their construction of ideas, sentences and paragraphs, word choice, voice, grammar, spelling including punctuation.

In terms of the students' attitude towards the use of AI, the study found out that students do not completely appreciate to use these tools because of the fact that they overlooked its usefulness and they only aware to its drawbacks or negative effects. Moreover, it was also found out that students have inadequate knowledge on the real purpose or function of AI in the field of writing, that is to develop their writing skills such as outlining and organizing ideas, improving writing styles, choosing appropriate words to increase readability and effectivity of transferring message, correcting grammar, mechanics and spelling. The students merely used these tools like Google that they just get ideas or information to include in their write ups.

Conclusion

Using AI powered writing tools by students can help them improve their aspects of writing such as focus and details, organization of ideas, voice, word choice, sentence structure, grammar, spelling and mechanics. Hence, the use of generative AI tools in writing composition class is a great move to strengthen the performance of students in different areas of writing. However, the study underscored that these AI tools could be a red flag if students do not really know its real benefits on them which leads them into its potential misuse. More so, the students were not comfortable or they could not appreciate to use AI writing tools because they were knowledgeable to its negative implications; however, they have lack of knowledge about the usefulness or the real



purpose of these tools. Having insufficient knowledge about the usefulness of AI writing tools leads the students to use these tools like search engine that they treat it as an idea or content-generator instead of an aid for effectively writing; given the fact that students like instant output nowadays.

Recommendations

In the light of the aforementioned findings and conclusion of the study, the following actions are highly recommended:

1. Educational managers should conduct seminars for students about the proper use of Generative AI tools to enlighten their minds about its real purpose in the field of writing. This is also a great step to get rid of its potential misuse and to teach the students on using this technology responsibly and ethically for them not to take advantage of using it whenever they have writing assignments or activities.
2. The teacher should balance the use of AI tools in teaching writing to the students so that they will not become over-reliant to it. There must be limitations. It is better to use AI tool as an aid for students to develop their writing performance not for output-generating tool to maintain academic integrity. This also calls for the teachers to monitor their students on using AI-powered tools whether they are using it properly in terms of its features which is very helpful for them to improve the effectivity and productivity of their write-ups.
3. Policy on the use of AI
4. To address the issue of plagiarism on using AI writing tools, the academe should develop detectors for AI generated texts and implement measures to check for possible plagiarism in written outputs.
5. This study should be replicated to validate its findings and conclusions; thus, this will serve as a roadmap for other researchers who have the same interest about the use of generative AI in writing composition.

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VI. ENDNOTES

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